												FC	RM 3		
					ST DEPARTMENT DIVISION O	OF NA					AMEN	IDED REPO			
		APPL	ICATION	FOR P	PERMIT TO DRILL	L				1. WELL NAME and		<b>R</b> Γ-5-9-16			
2. TYPE	<b>OF WORK</b>	RILL NEW WELL (I	REENT	ER P&A	. WELL ( DEEPE	N WELL				3. FIELD OR WILDO		NT BUTTE			
4. TYPE	OF WELL	Oil V	Vell (	Coalbed	I Methane Well: NO					5. UNIT or COMMU		FION AGR	EEMENT	NAME	
6. NAME	OF OPERATOR		NEWFIELD PR	RODUCT	TION COMPANY					7. OPERATOR PHONE 435 646-4825					
8. ADDR	ESS OF OPERA	TOR	Rt 3 Box 363	30 , Myt	ton, UT, 84052					9. OPERATOR E-MAIL mcrozier@newfield.com					
	ERAL LEASE NO				11. MINERAL OWNE	IAN (	) STATE (	) FEE(	_	12. SURFACE OWNERSHIP					
13. NAM	13. NAME OF SURFACE OWNER (if box 12 = 'fee')							J 1001		FEDERAL ( INC. 14. SURFACE OWNE	_	٠	-	FEE 🔔	
15. ADDI	15. ADDRESS OF SURFACE OWNER (if box 12 = 'fee')									16. SURFACE OWNER E-MAIL (if box 12 = 'fee')					
17 INDI	AN ALLOTTER	OR TRIBE NAME			18. INTEND TO COM		E PRODUCT	TION FROM	1	19. SLANT					
17. INDIAN ALLOTTEE OR TRIBE NAME (if box 12 = 'INDIAN')  WULTIPLE FORMATIONS YES (Submit Commit							gling Applicat	tion) NO (	•	VERTICAL DIR	ECTION	AL 📵	HORIZON	ITAL 🔵	
20. LOC	ATION OF WE	QT	R-QTR	SECT	ION	TOWNSHIP	R	ANGE	МЕ	RIDIAN					
LOCATI	ON AT SURFAC	CE	6	99 FSL	. 595 FWL	S	wsw	4		9.0 S	1	6.0 E		S	
Top of U	Jppermost Pro	ducing Zone	1	235 FS	L 67 FWL	S	SWSW	VSW 4		9.0 S	1	6.0 E		S	
At Total			1		L 187 FEL		NESE	5		9.0 S		6.0 E		S	
21. COUI		DUCHESNE			22. DISTANCE TO N	18	37			23. NUMBER OF AC		DRILLING 20	UNIT		
					25. DISTANCE TO N (Applied For Drilling		mpleted)	SAME POOL	L	26. PROPOSED DEP		TVD: 64	22		
27. ELEV	ATION - GROU	JND LEVEL		7	28. BOND NUMBER					29. SOURCE OF DRI			IF APP	LICABLE	
		5772			Hala Casina		00493					7478			
String	Hole Size	Casing Size	Length	Weig	Hole, Casing,		Max Mu		'	Cement		Sacks	Yield	Weight	
Surf	12.25	8.625	0 - 300	24.			8.3			Class G		138	1.17	15.8	
Prod	7.875	5.5	0 - 6422	15.	.5 J-55 LT8	&C	8.3	3	Prem	nium Lite High Stre	ngth	306	3.26	11.0	
										50/50 Poz 363 1.24				14.3	
					A	TTACH	MENTS								
	VERIFY T	HE FOLLOWIN	G ARE ATT	ACHE	D IN ACCORDAN	CE WI	TH THE U	TAH OIL	AND (	GAS CONSERVATI	ON GE	NERAL F	RULES		
<b>⊮</b> w	ELL PLAT OR	MAP PREPARED B	Y LICENSED	SURV	EYOR OR ENGINEE	R	<b>✓</b> COM	IPLETE DR	ILLING	PLAN					
AF	FIDAVIT OF S	TATUS OF SURFA	CE OWNER	AGREEI	MENT (IF FEE SURF	ACE)	FORI	M 5. IF OPI	ERATO	R IS OTHER THAN TI	HE LEAS	SE OWNER	ł		
	DIRECTIONAL SURVEY PLAN (IF DIRECTIONALLY OR HORIZONTALLY DRILLED)							OGRAPHIC	AL MAI	•					
NAME M	landie Crozier				TITLE Regulatory	Tech			PHOI	<b>NE</b> 435 646-4825					
SIGNAT	SIGNATURE         DATE 03/07/2011								EMA	L mcrozier@newfield.	com				
	APPROVAL 43013506330000						Broogfill								
					Permit Manager										

# NEWFIELD PRODUCTION COMPANY GMBU T-5-9-16 AT SURFACE: SW/SW SECTION 4, T9S, R16E DUCHESNE COUNTY, UTAH

#### TEN POINT DRILLING PROGRAM

#### 1. **GEOLOGIC SURFACE FORMATION:**

Uinta formation of Upper Eocene Age

#### 2. <u>ESTIMATED TOPS OF IMPORTANT GEOLOGIC MARKERS:</u>

 Uinta
 0' – 1455'

 Green River
 1455'

 Wasatch
 6065'

 Proposed TD
 6422'

1

#### 3. <u>ESTIMATED DEPTHS OF ANTICIPATED WATER, OIL, GAS OR MINERALS:</u>

Green River Formation (Oil) 1455' – 6065'

Fresh water may be encountered in the Uinta Formation, but would not be expected below about 350'. All water shows and water bearing geologic units shall be reported to the geologic and engineering staff of the Vernal Office prior to running the next string of casing or before plugging orders are requested. All water shows must be reported within one (1) business day after being encountered.

All usable (<10,000 PPM TDS) water and prospectively valuable minerals (as described by BLM at onsite) encountered during drilling will be recorded by depth and adequately protected. This information shall be reported to the Vernal Office.

Detected water flows shall be sampled, analyzed, and reported to the geologic & engineering staff of the Vernal Office. The office may request additional water samples for further analysis. Usage of the State of Utah form *Report of Water Encountered* is acceptable, but not required.

The following information is requested for water shows and samples where applicable:

Location & Sampled Interval Date Sampled Flow Rate Temperature Hardness pH

Water Classification (State of Utah)

Dissolved Calcium (Ca) (mg/l)

Dissolved Iron (Fe) (ug/l)

Dissolved Sodium (Na) (mg/l)

Dissolved Carbonate (CO<sub>3</sub>) (mg/l)

Dissolved Bicarbonate (NaHCO<sub>3</sub>) (mg/l)

Dissolved Chloride (Cl) (mg/l)

Dissolved Sulfate (SO<sub>4</sub>) (mg/l) Dissolved Total Solids (TDS) (mg/l)

#### 4. PROPOSED CASING PROGRAM

a. Casing Design: GMBU T-5-9-16

Size	l l	nterval	Weight	Grade	Coupling		Design Factors		
	Тор	Bottom	vveignt	Grade	Couping	Burst	Collapse         Tension           1,370         244,000           14.35         33.89           4,040         217,000		
Surface casing	0"	300'	24.0	J-55	STC	2,950	1,370	244,000	
8-5/8"	0	300	24.0	J-55	310	17.53	14.35	33.89	
Prod casing	01	C 4001	4		1.70	4,810	4,040	217,000	
5-1/2"	0"	6,422'	15.5	J-55	J-55 LTC 2.		1.98	2.18	

#### Assumptions:

1

- 1) Surface casing max anticipated surface press (MASP) = Frac gradient gas gradient
- 2) Prod casing MASP (production mode) = Pore pressure gas gradient
- 3) All collapse calculations assume fully evacuated casing w/ gas gradient
- 4) All tension calculations assume air weight

Frac gradient at surface casing shoe = 13.0 ppg
Pore pressure at surface casing shoe = 8.33 ppg
Pore pressure at prod casing shoe = 8.33 ppg
Gas gradient = 0.115 psi/ft

All casing shall be new or, if used, inspected and tested. Used casing shall meet or exceed API standards for new casing.

All casing strings shall have a minimum of 1 (one) centralizer on each of the bottom three (3) joints.

b. Cementing Design: GMBU T-5-9-16

Job	Fill	Description	Sacks ft <sup>3</sup>	OH Excess*	Weight (ppg)	Yield (ft³/sk)	
Surface casing	300'	Class G w/ 2% CaCl	138	30%	15.8	1.17	
Surface casing	300	Class G W/ 2/0 CaCl	161	3070	15.0	1.17	
Prod casing	4,422'	Prem Lite II w/ 10% gel + 3%	306	30%	11.0	3.26	
Lead	4,422	KCI	996	3070	1150	3.20	
Prod casing 2,000		50/50 Poz w/ 2% gel + 3%	363	30%	14.3	1.24	
Tail	2,000	KCI	451	30 /0	14.5	1.24	

- \*Actual volume pumped will be 15% over the caliper log
- Compressive strength of lead cement: 1800 psi @ 24 hours, 2250 psi @ 72 hours
- Compressive strength of tail cement: 2500 psi @ 24 hours

Hole Sizes: A 12-1/4" hole will be drilled for the 8-5/8" surface casing. A 7-7/8" hole will be drilled for the 5-1/2" production casing.

The 8-5/8" surface casing shall in all cases be cemented back to surface. In the event that during the primary surface cementing operation the cement does not circulate to surface, or if the cement level should fall back more than 8 feet from surface, then a remedial surface cementing operation shall be performed to insure adequate isolation and stabilization of the surface casing.

#### 5. MINIMUM SPECIFICATIONS FOR PRESSURE CONTROL:

The operator's minimum specifications for pressure control equipment are as follows:

An 8" Double Ram Hydraulic unit with a closing unit will be utilized. Function test of BOP's will be check daily.

Refer to **Exhibit C** for a diagram of BOP equipment that will be used on this well.

#### 6. TYPE AND CHARACTERISTICS OF THE PROPOSED CIRCULATION MUDS:

From surface to  $\pm 350$  feet will be drilled with an air/mist system. The air rig is equipped with a 6 ½" blooie line that is straight run and securely anchored. The blooie line is used with a discharge less than 100 ft from the wellbore in order to minimize the well pad size. The blooie line is not equipped with an automatic igniter or continuous pilot light and the compressor is located less than 100 ft from the well bore due to the low possibility of combustion with the air dust mixture. The trailer mounted compressor (capacity of 2000 CFM) has a safety shut-off valve which is located 15 feet from the air rig. A truck with 70 bbls of water is on stand by to be used as kill fluid, if necessary. From about  $\pm 350$  feet to TD, a fresh water system will be utilized. Clay inhibition and hole stability will be achieved with a KCl substitute additive. This additive will be identified in the APD and reviewed to determine if the reserve pit shall be lined. This fresh water system will typically contain Total Dissolved Solids (TDS) of less than 3000 PPM. Anticipated mud weight is 8.4 lbs/gal. If necessary to control formation fluids or pressure, the system will be weighted with the addition of bentonite gel, and if pressure conditions warrant, with barite

No chromate additives will be used in the mud system on Federal and/or Indian lands without prior BLM approval to ensure adequate protection of fresh aquifers.

No chemicals subject to reporting under SARA Title III in an amount equal to or greater than 10,000 pounds will be used, produced, stored, transported, or disposed of annually in association with the drilling, testing, or completing of this well. Furthermore, no extremely hazardous substances, as defined in 40 CFR 355, in threshold planning quantities, will be used, produced, stored, transported, or disposed of in association with the drilling, testing, or completing of this well.

Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing, or completion operations.

Newfield Production will **visually** monitor pit levels and flow from the well during drilling operations.

#### 7. AUXILIARY SAFETY EQUIPMENT TO BE USED:

Auxiliary safety equipment will be a Kelly Cock, bit float, and a TIW valve with drill pipe threads.

#### **TESTING, LOGGING AND CORING PROGRAMS:**

The logging program will consist of a Dual Induction, Gamma Ray and Caliper log from TD to base of surface casing @ 300' +/-, and a Compensated Neutron-Formation Density Log from TD to 3500' +-. A cement bond log will be run from PBTD to cement top. No drill stem testing or coring is planned for this well.

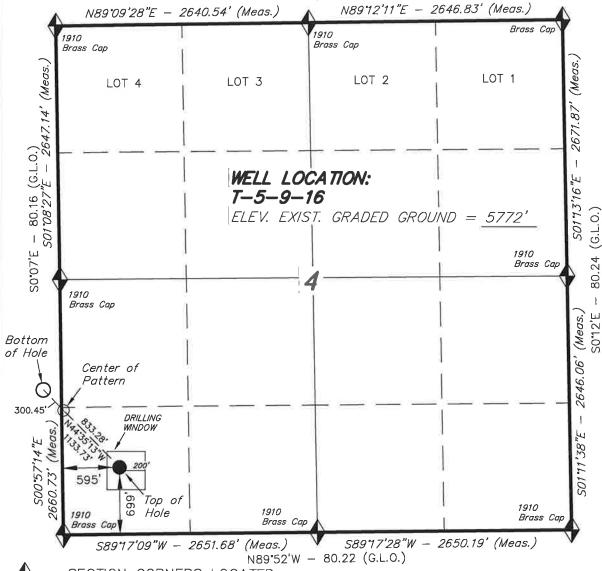
#### 9. **ANTICIPATED ABNORMAL PRESSURE OR TEMPERATURE:**

No abnormal temperatures or pressures are anticipated. No hydrogen sulfide has been encountered or is known to exist from previous drilling in the area at this depth. Maximum anticipated bottomhole pressure will approximately equal total depth in feet multiplied by a 0.433 psi/foot gradient.

# 10. <u>ANTICIPATED STARTING DATE AND DURATION OF THE OPERATIONS:</u>

It is anticipated that the drilling operations will commence the third quarter of 2011, and take approximately seven (7) days from spud to rig release.

# T9S, R16E, S.L.B.&M. S89'57'E (G.L.O.)



SECTION CORNERS LOCATED

BASIS OF ELEV; Elevations are base on LOCATION: an N.G.S. OPUS Correction. LAT. 40°04'09.56" LONG. 110°00'43.28" (Tristate Aluminum Cap) Elev. 5281.57'

T-5-9-16 (Surface Location) NAD 83  $LATITUDE = 40^{\circ} 03' 16.35''$ LONGITUDE = 110° 07' 53.99"

# NEWFIELD EXPLORATION COMPANY

WELL LOCATION, T-5-9-16, LOCATED AS SHOWN IN THE SW 1/4 SW 1/4 OF SECTION 4, T9S, R16E, S.L.B.&M. DUCHESNE COUNTY, UTAH.



#### NOTES:

(G.L.O.)

- 1. Well footages are measured at right anales to the Section Lines.
- 2. Bearings are based on Global Positioning Satellite observations.
- 2. The Center of Pattern footages are 1300' FSL & 20' FWL.

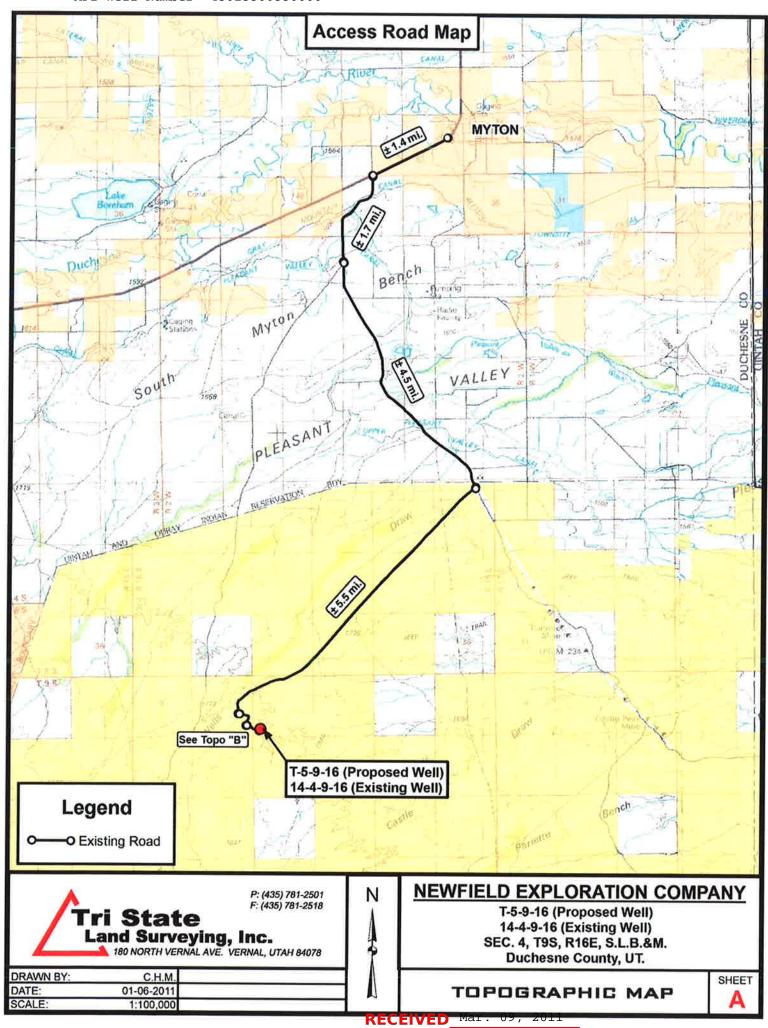
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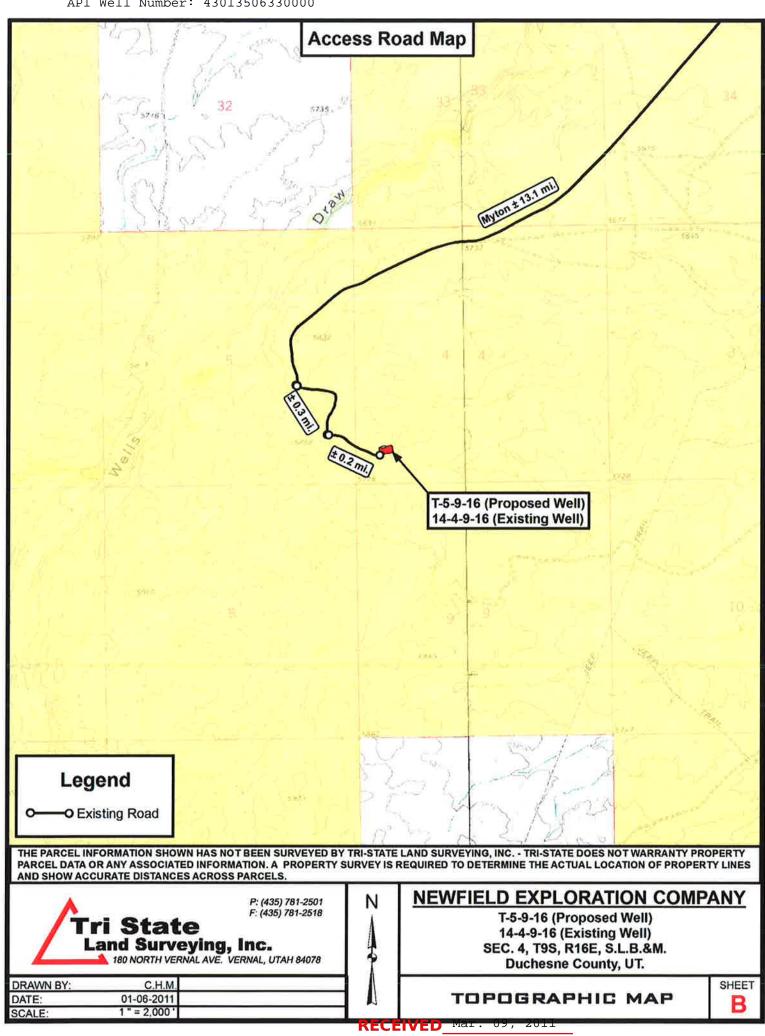
## TRI STATE LAND SURVEYING & CONSULTING

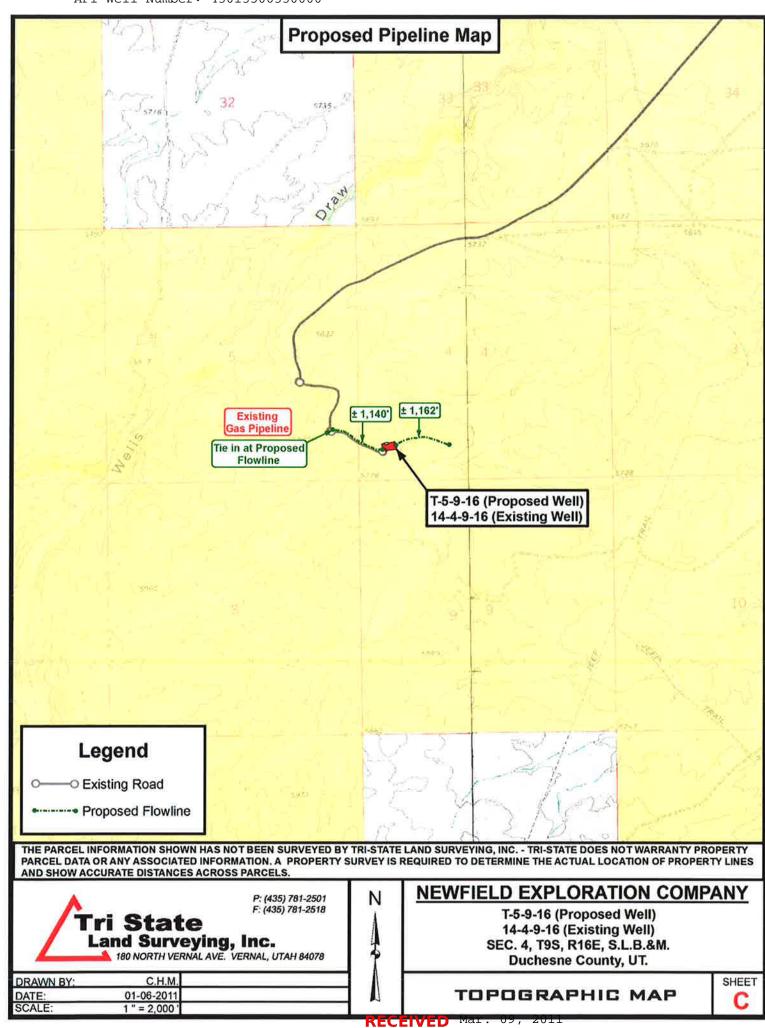
180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 (435) 781-2501

( / .	
DATE SURVEYED: 11-01-10	SURVEYED BY: D.G.
DATE DRAWN: 01-04-11	DRAWN BY: M.W.
REVISED:	SCALE: 1" = 1000'

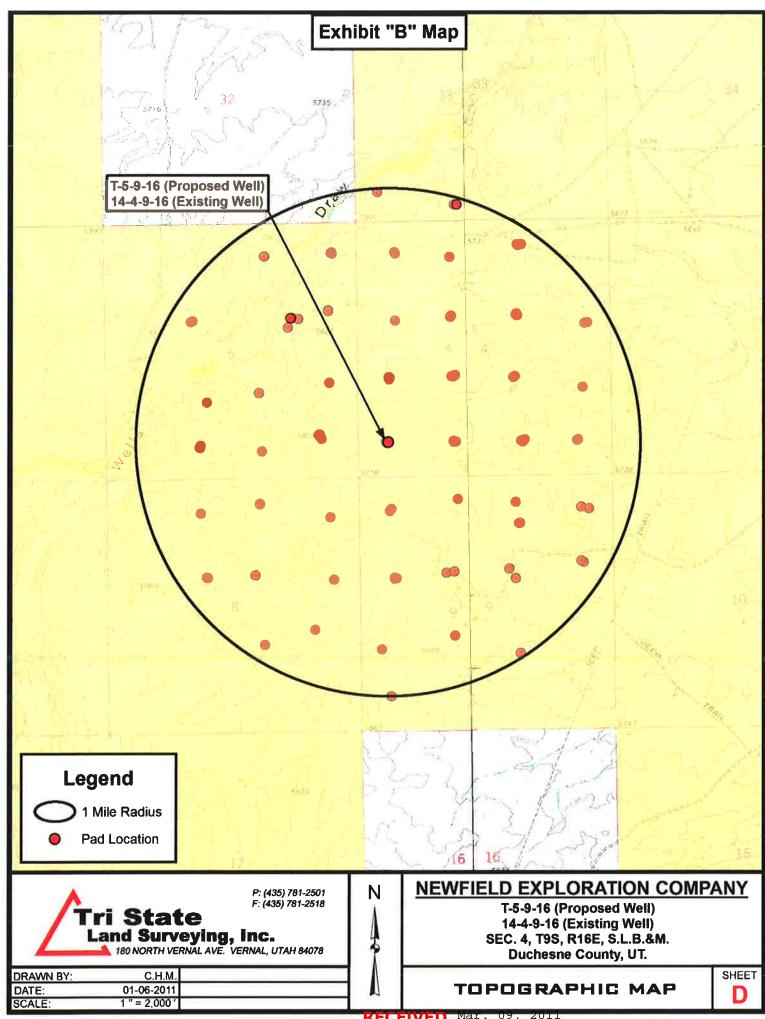
#### T9S, R16E, S.L.B.&M. NEWFIELD EXPLORATION COMPANY S89'57'E (G.L.O.) TARGET BOTTOM HOLE, T-5-9-16, N89'00'55"E - 2642.97' (Meas.) N89°04'57"E - 2644.70' (Meas.) LOCATED AS SHOWN IN THE NE 1/4 SE 1910 1910 Brass Cap 1/4 OF SECTION 5, T9S, R16E, Brass Cap Brass Cap S.L.B.&M. DUCHESNE COUNTY, UTAH. LOT 1 LOT 2 LOT 4 LOT 3 2640.65 (G.L.O.) SCALE TARGET BOTTOM HOLE: NOTES: 1. Well footages are measured at right T-5-9-16 angles to the Section Lines. 2. Bearings are based on Global 1910 Positioning Satellite observations. Brass Cap 1910 Brass Cap **Bottom** of Hole 2640.65' THIS IS TO CERTIFY THAT PREPARED FROM FIELD MADE BY ME OR UNDER AN THE SAME ARE TRUE AND Center of OF MY KNOWLEDGE AND BEING. 18937 Pattern of Hole 1910 1910 1910 Brass Cap Brass Cap Brass Cap S89°13'41"W - 2644.77' (Meas.) S89°26'41"W - 2648.57' (Meas.) TRI STATE LAND SURVEYING & CONSULTING $N89^{54}W - 80.06 (G.L.O.)$ 180 NORTH VERNAL AVE. - VERNAL, UTAH 84078 = SECTION CORNERS LOCATED (435) 781-2501DATE SURVEYED: BASIS OF ELEV; Elevations are base on SURVEYED BY: D.G. 11-01-10 LOCATION: an N.G.S. OPUS Correction. DATE DRAWN: LAT. 40°04'09.56" LONG. 110°00'43.28" DRAWN BY: M.W. 01 - 04 - 11(Tristate Aluminum Cap) Elev. 5281.57' REVISED: SCALE: 1'' = 1000'







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RECEIVED Mar. 09, 2011



# **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 4 T-5-9-16

Wellbore #1

Plan: Design #1

# **Standard Planning Report**

05 January, 2011





## PayZone Directional Services, LLC.

#### Planning Report



Database: Company: Project:

EDM 2003.21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT)

Site: **SECTION 4** Well: T-5-9-16 Wellbore: Wellbore #1 Design #1 Design:

Local Co-ordinate Reference:

**TVD Reference:** MD Reference: North Reference:

**Survey Calculation Method:** 

Well T-5-9-16

T-5-9-16 @ 5784.0ft (Newfield Rig) T-5-9-16 @ 5784.0ft (Newfield Rig)

Minimum Curvature

Project USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

US State Plane 1983 Map System: Geo Datum:

Map Zone:

North American Datum 1983

Utah Central Zone

System Datum:

7,193,502.00 ft

Mean Sea Level

SECTION 4, SEC 4 T9S, R16E Site

+E/-W

Northing: Site Position: Easting: From: Lat/Long Position Uncertainty: 0.0 ft

2,026,216.16 ft Slot Radius:

Latitude: Longitude: Grid Convergence:

40° 3' 35,508 N 110° 7' 17.611 W 0.88 °

Well T-5-9-16, SHL LAT: 40 03 16.35 LONG: -110 07 53.99

**Well Position** +N/-S

-1,938.7 ft -2,828.4 ft

Northing: Easting:

7,191,520,30 ft 2,023,417.76 ft Latitude: Longitude:

40° 3' 16,350 N 110° 7' 53.990 W

**Position Uncertainty** 

0.0 ft

Wellhead Elevation:

5,784.0 ft

**Ground Level:** 

5,772.0 ft

Wellbore Wellbore #1 Declination Dip Angle Field Strength Magnetics **Model Name** Sample Date (°) (°) (nT) IGRF2010 2010/12/28 11.40 65.80 52,309

Design	Design #1					
Audit Notes:						
Version:		Phase:	PROTOTYPE	Tie On Depth:	0.0	
Vertical Section:		Depth From (TVD)	+N/-S	+E/-W	Direction	
		(ft)	(ft)	(ft)	(°)	
		0.0	0.0	0.0	315.41	

leasured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)	TFO (°)	Target
0.0	0.00	0.00	0.0	0.0	0.0	0.00	0.00	0.00	0.00	
600.0	0.00	0.00	600.0	0.0	0.0	0.00	0.00	0.00	0.00	
1,404.8	12.07	315.41	1,398.9	60.2	-59.3	1.50	1.50	0.00	315,41	
4,985.1	12.07	315.41	4,900.0	593.4	-585.0	0.00	0.00	0.00	0.00	T-5-9-16 TGT
6,421.9	12,07	315.41	6,305.0	807.4	-795.9	0.00	0.00	0.00	0.00	



## PayZone Directional Services, LLC.

**Planning Report** 



Database: Company: Project: Site:

Wellbore:

Well:

EDM 2003,21 Single User Db NEWFIELD EXPLORATION USGS Myton SW (UT)

SECTION 4 T-5-9-16 Wellbore #1 Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well T-5-9-16

T-5-9-16 @ 5784.0ft (Newfield Rig) T-5-9-16 @ 5784.0ft (Newfield Rig)

True

Minimum Curvature

esign:	Design #1			1000		27 T			
Planned Survey	M.								and the same
Measured Depth	Inclination	Azimuth	Vertical Depth	+N/-S	+E/-W	Vertical Section	Dogleg Rate	Build Rate	Turn Rate
(ft)	(°)	(°)	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
100.0	0.00	0.00	100.0	0.0	0.0	0.0	0.00	0.00	0.00
200.0	0.00	0.00	200.0	0.0	0.0	0.0	0.00	0.00	0.00
300.0	0.00	0.00	300.0	0_0	0.0	0.0	0.00	0.00	0.00
400.0	0.00	0.00	400.0	0.0	0.0	0,0	0.00	0.00	0.00
500.0	0.00	0.00	500.0	0.0	0.0	0.0	0.00	0.00	0.00
600.0	0.00	0.00	600.0	0.0	0.0	0.0	0.00	0.00	0.00
700.0	1.50	315.41	700.0	0.9	-0.9	1.3	1.50	1.50	0.00
800.0	3.00	315.41	799.9	3.7	-3.7	5.2	1.50	1.50	0.00
900.0	4.50	315,41	899.7	8.4	-8,3	11,8	1.50	1.50	0.00
1,000.0	6.00	315.41	999:3	14.9	-14:7	20.9	1.50	1.50	0.00
1,100.0	7.50	315.41	1,098.6	23.3	-22,9	32.7	1.50	1.50	0.00
1,200.0	9.00	315.41	1,197,5	33.5	-33.0	47.0	1.50	1.50	0.00
1,300.0	10,50	315.41	1,296.1	45.5	-44.9	64.0	1.50	1.50	0.00
1,404.8	12.07	315,41	1,398.9	60.2	-59,3	84.5	1,50	1.50	0.00
1,500.0	12.07	315.41	1,492.0	74.3	-73.3	104.4	0.00	0.00	0.00
1,600.0	12.07	315.41	1,589.7	89.2	-88,0	125,3	0.00	0.00	0.00
1,700.0	12.07	315.41	1,687.5	104.1	-102.6	146.2	0.00	0.00	0.00
1,800.0	12.07	315.41	1,785.3	119.0	-117.3	167.1	0.00	0.00	0.00
1,900.0	12.07	315.41	1,883.1	133.9	-132.0	188.0	0.00	0.00	0.00
2,000.0	12.07	315.41	1,980.9	148.8	-146.7	209.0	0.00	0.00	0.00
2,100.0	12.07	315.41	2,078.7	163.7	-161.4	229.9	0.00	0.00	0.00
2,200.0	12.07	315.41	2,176.5	178.6	-176.1	250.8	0.00	0.00	0.00
2,300.0	12.07	315.41	2,274.3	193.5	-190.7	271.7	0.00	0.00	0.00
2,400.0	12.07	315.41	2,372.0	208.4	-205.4	292.6	0_00	0.00	0.00
2,500.0	12,07	315.41	2,469.8	223,3	-220.1	313.5	0_00	0.00	0.00
2,600.0	12.07	315.41	2,567.6	238.2	-234.8	334.4	0.00	0.00	0.00
2,700.0	12.07	315.41	2,665.4	253.1	-249.5	355.4	0.00	0.00	0.00
2,800.0	12.07	315.41	2,763.2	268.0	-264.2	376.3	0.00	0.00	0.00
2,900.0	12.07	315.41	2,861.0	282.9	-278.8	397.2	0.00	0.00	0.00
3,000.0	12.07	315,41	2,958.8	297.7	-293,5	418.1	0.00	0.00	0.00
3,100.0	12.07	315.41	3,056.6	312.6	-308.2	439.0	0.00	0.00	0.00
	12.07	315.41		327-5	-322.9	459.9	0.00	0.00	0.00
3,200.0			3,154.4			480.8	0.00		0.00
3,300.0 3,400.0	12.07 12.07	315.41 315.41	3,252.1 3,349.9	342.4 357.3	-337.6 -352.2	501.8	0.00	0.00	0.00
3,500.0 3,600.0	12.07 12.07	315.41 315.41	3,447.7 3,545.5	372.2 387.1	-366.9 -381.6	522.7 543.6	0.00	0.00 0.00	0.00 0.00
3,700.0	12.07	315.41	3,643.3	402.0	-396.3	564.5	0.00	0.00	0.00
3,800.0	12.07	315.41	3,741.1	416.9	-390.3 -411.0	585.4	0.00	0.00	0.00
3,900.0	12.07	315.41	3,838.9	431.8	-411.0 -425.7	606.3	0.00	0.00	0.00
4,000.0	12.07	315.41	3,936.7	446.7	-440.3	627.2	0.00	0.00	0.00
4,100.0	12.07	315.41	4,034.5	461.6	-455.0	648.2	0.00	0.00	0.00
4,200.0	12.07	315.41	4,132-2	476.5	-469.7	669.1	0.00	0.00	0.00
4,300.0	12.07	315.41	4,132.2	491.4	-469.7 -484.4	690.0	0.00	0.00	0.00
4,400.0	12.07	315.41	4,327.8	506.3	-404.4 -499.1	710.9	0.00	0.00	0.00
4,500.0	12.07	315.41	4,425.6	521.2	-513.8	731.8	0.00	0.00	0.00
4,600.0	12.07	315.41	4,523.4	536_1	-528_4	752.7	0.00	0.00	0.00
4,700.0	12.07	315,41	4,621.2	551.0	-543.1	773.6	0.00	0.00	0.00
4,800,0	12.07	315.41	4,719.0	565.8	-557-8	794.6	0.00	0.00	0.00
4,900.0	12.07	315.41	4,816.8	580.7	-572.5	815.5	0.00	0.00	0.00
4,985.1	12.07	315.41	4,900.0	593.4	-585.0	833.3	0.00	0.00	0.00
T-5-9-16 TGT									
5,000.0	12.07	315.41	4,914.5	595.6	-587.2	836.4	0.00	0.00	0.00
5,100.0	12.07	315.41	5,012.3	610.5	-601.9	857.3	0.00	0.00	0.00



## PayZone Directional Services, LLC.

Planning Report



Database: Company: Project: Site: EDM 2003.21 Single User Db NEWFIELD EXPLORATION

USGS Myton SW (UT) SECTION 4

Well: T-5-9-16
Wellbore: Wellbore #1
Design: Design #1

Local Co-ordinate Reference:

TVD Reference: MD Reference: North Reference:

Survey Calculation Method:

Well T-5-9-16

T-5-9-16 @ 5784.0ft (Newfield Rig) T-5-9-16 @ 5784.0ft (Newfield Rig)

True

Minimum Curvature

Measured Depth (ft)	Inclination (°)	Azimuth	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
5,200.0	12.07	315,41	5,110.1	625.4	-616.5	878.2	0.00	0.00	0.00
5,300.0	12,07	315.41	5,207.9	640.3	-631.2	899.1	0_00	0.00	0.00
5,400.0	12.07	315.41	5,305.7	655.2	-645.9	920.1	0.00	0.00	0.00
5,500.0	12.07	315.41	5,403.5	670_1	-660.6	941.0	0.00	0.00	0.00
5,600.0	12.07	315.41	5,501.3	685.0	-675.3	961.9	0.00	0.00	0.00
5,700.0	12.07	315.41	5,599.1	699.9	-689.9	982.8	0.00	0.00	0.00
5,800.0	12.07	315.41	5,696.9	714:8	-704.6	1,003.7	0.00	0.00	0.00
5,900.0	12.07	315.41	5,794.6	729.7	-719.3	1,024.6	0_00	0.00	0.00
6,000.0	12.07	315,41	5,892.4	744.6	-734.0	1,045.5	0.00	0.00	0.00
6,100.0	12.07	315.41	5,990.2	759,5	-748.7	1,066.5	0.00	0.00	0.00
6,200.0	12.07	315.41	6,088.0	774.4	-763.4	1,087.4	0.00	0.00	0.00
6,300.0	12.07	315.41	6,185.8	789.3	-778.0	1,108.3	0.00	0.00	0.00
6,400.0	12,07	315,41	6,283,6	804.2	-792.7	1,129,2	0.00	0.00	0.00
6,421.9	12.07	315,41	6,305.0	807.4	-795.9	1,133.8	0.00	0.00	0.00

Targets									
Target Name - hit/miss target - Shape	Dip Angle (°)	Dip Dir. (°)	TVD (ft)	+N/-S (ft)	+E/-W (ft)	Northing (ft)	Easting (ft)	Latitude	Longitude
T-5-9-16 TGT - plan hits target - Circle (radius 75.0	0.00	0,00	4,900,0	593.4	-585,0	7,192,104.71	2,022,823,77	40° 3' 22,215 N	110° 8' 1.514 W



Project: USGS Myton SW (UT)

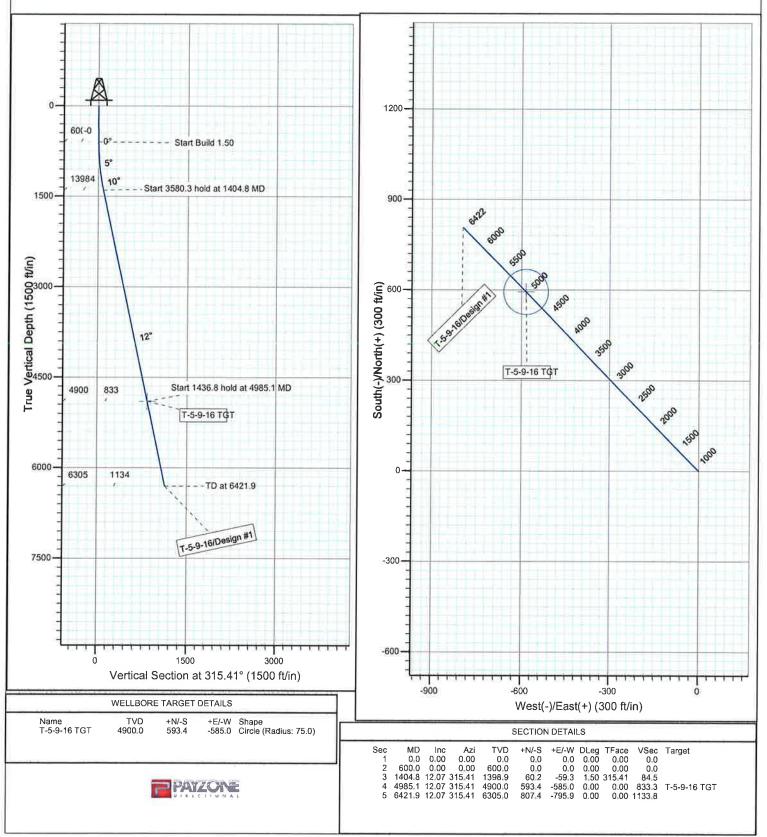
Site: SECTION 4 Well: T-5-9-16 Wellbore: Wellbore #1 Design: Design #1



Azimuths to True North Magnetic North: 11.40°

Magnetic Field Strength: 52309.4snT Dip Angle: 65.80° Date: 2010/12/28 Model: IGRF2010

KOP @ 600' DOGLEG RATE 1.5 DEG/100 TARGET RADIUS IS 75'



# NEWFIELD PRODUCTION COMPANY GMBU T-5-9-16 AT SURFACE: SW/SW SECTION 4, T9S, R16E DUCHESNE COUNTY, UTAH

#### **ONSHORE ORDER NO. 1**

#### **MULTI-POINT SURFACE USE & OPERATIONS PLAN**

#### 1. EXISTING ROADS

See attached Topographic Map "A"

To reach Newfield Production Company well location site GMBU T-5-9-16 located in the SW 1/4 SW 1/4 Section 4, T9S, R16E, Duchesne County, Utah:

Proceed southwesterly out of Myton, Utah along Highway 40 - 1.4 miles  $\pm$  to the junction of this highway and UT State Hwy 53; proceed southeasterly -6.2 miles  $\pm$  to it's junction with an existing road to the southwest; proceed in a southwesterly direction -5.5 miles  $\pm$  to it's junction with an existing road to the east; proceed in a southeasterly direction -0.5 miles  $\pm$  to it's junction with the beginning of the access road to the existing 14-4-9-16 well location.

The aforementioned dirt oil field service roads and other roads in the vicinity are constructed out of existing native materials that are prevalent to the existing area they are located in and range from clays to a sandy-clay shale material.

The roads for access during the drilling, completion and production phase will be maintained at the standards required by the State of Utah, or other controlling agencies. This maintenance will consist of some minor grader work for smoothing road surfaces and for snow removal. Any necessary fill material for repair will be purchase and hauled from private sources.

#### 2. PLANNED ACCESS ROAD

There is no proposed access road for this location. The proposed well will be drilled directionaly off of the existing 14-4-9-16 well pad. See attached **Topographic Map "B"**.

There will be **no** culverts required along this access road. There will be barrow ditches and turnouts as needed along this road.

There are no fences encountered along this proposed road. There will be no new gates or cattle guards required.

All construction material for this access road will be borrowed material accumulated during construction of the access road.

#### 3. LOCATION OF EXISTING WELLS

Refer to Exhibit "B".

#### 4. LOCATION OF EXISTING AND/OR PROPOSED FACILITIES

There are no existing facilities that will be used by this well.

It is anticipated that this well will be a producing oil well.

Upon construction of a tank battery, the well pad will be surrounded by a dike of sufficient capacity to contain at minimum 110% of the largest tank volume within the facility battery.

Tank batteries will be built to State specifications.

All permanent (on site for six (6) months or longer) structures, constructed or installed (including pumping units), will be painted a flat, non-reflective, earth tone color to match one of the standard environmental colors, as determined by the Rocky Mountain Five State Interagency Committee. All facilities will be painted within six months of installation.

#### 5. LOCATION AND TYPE OF WATER SUPPLY

Newfield Production will transport water by truck from nearest water source as determined by a Newfield representative for the purpose of drilling the above mentioned well. The available water sources are as follows:

Johnson Water District Water Right: 43-10136

Maurice Harvey Pond Water Right: 47-1358

Neil Moon Pond

Water Right: 43-11787

Newfield Collector Well

Water Right: 47-1817 (A30414DVA, contracted with the Duchesne County Conservancy

District).

There will be no water well drilled at this site.

#### 6. <u>SOURCE OF CONSTRUCTION MATERIALS</u>

All construction material for this location shall be borrowed material accumulated during construction of the location site and access road.

A mineral material application is not required for this location.

#### 7. METHODS FOR HANDLING WASTE DISPOSAL

A small reserve pit (90' x 40' x 8' deep, or less) will be constructed from native soil and clay materials. The reserve pit will receive the processed drill cutting (wet sand, shale & rock) removed from the wellbore. Any drilling fluids, which do accumulate in the pit as a result of shale-shaker carryover, cleaning of the sand trap, etc., will be promptly reclaimed. All drilling fluids will be fresh water based, typically containing Total Dissolved Solids of less than 3000 PPM. No potassium chloride, chromates, trash, debris, nor any other substance deemed hazardous will be placed in this pit. Therefore, it is proposed that no synthetic liner be required in the reserve pit. However, if upon constructing the pit there is insufficient fine clay and silt present, a liner will be used for the purpose of reducing water loss through percolation.

Newfield requests approval that a flare pit not be constructed or utilized on this location.

A portable toilet will be provided for human waste.

A trash basket will be provided for garbage (trash) and hauled away to an approved disposal site at the completion of the drilling activities.

## 8. ANCILLARY FACILITIES

There are no ancillary facilities planned for at the present time and none foreseen in the near future.

#### 9. WELL SITE LAYOUT

See attached Location Layout Sheet.

#### **Fencing Requirements**

All pits will be fenced according to the following minimum standards:

- a) A 39-inch net wire shall be used with at least one strand of barbed wire on top of the net.
- b) The net wire shall be no more than two (2) inches above the ground. The barbed wire shall be three (3) inches above the net wire. Total height of the fence shall be at least forty-two (42) inches.
- c) Corner posts shall be centered and/or braced in such a manner to keep tight at all times
- d) Standard steel, wood or pipe posts shall be used between the corner braces. Maximum distance between any two posts shall be no greater than sixteen (16) feet.
- e) All wire shall be stretched, by using a stretching device, before it is attached to the corner posts.

The reserve pit fencing will be on three (3) sides during drilling operations and on the fourth side when the rig moves off location. Pits will be fenced and maintained until cleanup.

Existing fences to be crossed by the access road will be braced and tied off before cutting so as to prevent slacking in the wire. The opening shall be closed temporarily as necessary during construction to prevent the escape of livestock, and upon completion of construction the fence shall be repaired to BLM specifications.

#### 10. PLANS FOR RESTORATION OF SURFACE:

#### a) Producing Location

Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, material, trash and junk not required for production.

The reserve pit and that portion of the location not needed for production facilities/operations will be recontoured to the approximated natural contours. Weather permitting, the reserve pit will be reclaimed within one hundred twenty (120) days from the date of well completion. Before any dirt work takes place, the reserve pit must have all fluids and hydrocarbons removed.

#### b) Dry Hole Abandoned Location

At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment and the State of Utah will attach the appropriate surface rehabilitation conditions of approval.

#### 11. <u>SURFACE OWNERSHIP</u> – Bureau of Land Management.

#### 12. OTHER ADDITIONAL INFORMATION

The Archaeological Resource Survey and Paleontological Resource Survey for this area are attached. MOAC Report #09-148, 12/14/09. Paleontological Resource Survey prepared by, Wade E. Miller, 8/14/09. See attached report cover pages, Exhibit "D".

Newfield requests 2,302' of surface flow line be granted. The Surface Flow Line will consist of up to a 14" bundled pipe consisting of 2-2" poly glycol lines and 1-3" production line. For all new wells, Newfield. **Refer to Topographic Map "D"** for the proposed location of the proposed flow line. Flow lines will be tan and will be constructed using the following procedures:

Clearing and Grading: No clearing or grading of the ROW will be required. The centerline of the proposed route will be staked prior to installation. Flow lines shall be placed as close to existing roads as possible without interfering with normal road travel or road maintenance activities. Due to the proximity of existing facilities, no temporary use or construction/storage areas are anticipated. If necessary, temporary use or construction/storage areas will be identified on a topographic map included in the approved permit.

<u>Installation</u>: The proposed flow lines will be installed 4-6" above the ground. For portions along existing two-track and primary access roads, lengths of pipe will be strung out in the borrow ditch, welded together, and rolled or dragged into place with heavy equipment. For pipelines that are installed cross-country (not along existing or proposed roads), travel along the lines will be infrequent and for maintenance needs only. No installation activities will be performed during periods when the soil is too wet to adequately support installation equipment. If such equipment creates ruts in excess of three (3) inches deep, the soil will be deemed too wet to adequately support the equipment.

<u>Termination and Final Reclamation:</u> After abandonment of the associated production facilities, the flow lines will be cut and removed, and any incidental surface disturbance reclaimed. Reclamation procedures will follow those outlined in the Castle Peak and Eight Mile Flat Reclamation and Weed Management Plan.

#### Water Disposal

After first production, if the production water meets quality guidelines, it will be transported to the Ashley, Monument Butte, Jonah, South Wells Draw and Beluga water injection facilities by company or contract trucks. Subsequently, the produced water is injected into approved Class II wells to enhance Newfield's secondary recovery project. Water not meeting quality criteria, will be disposed at Newfield's Pariette #4 disposal well (Sec. 7, T9S R19E), Federally approved surface disposal facilities or at a State of Utah approved surface disposal facilities.

#### **Additional Surface Stipulations**

All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws and regulations, Onshore Oil and Gas Orders, the approved plan of operations and any applicable Notice to Lessees. A copy of these conditions will be furnished to the field representative to ensure compliance.

#### **Details of the On-Site Inspection**

The proposed GMBU T-5-9-16 was on-sited on 2/2/11. The following were present; Tim Eaton (Newfield Production), Christine Cimiluca (Bureau of Land Management), and Suzanne Grayson (Bureau of Land Management).

## Hazardous Material Declaration

Newfield Production Company guarantees that during the drilling and completion of the GMBU T-5-9-16, Newfield will not use, produce, store, transport or dispose 10,000# annually of any of the hazardous chemicals contained in the Environmental Protection Agency's consolidated list of chemicals subject to reporting under Title III Superfund Amendments and Reauthorization Act (SARA) of 1986. Newfield also guarantees that during the drilling and completion of the GMBU T-5-9-16, Newfield will use, produce, store, transport or dispose less than the threshold planning quantity (T.P.Q.) of any extremely hazardous substances as defined in 40 CFR 355.

A complete copy of the approved APD, if applicable, shall be on location during the construction of the location and drilling activities.

Newfield Production Company or a contractor employed by Newfield Production shall contact the State office at (801) 722-3417, 48 hours prior to construction activities.

# 13. <u>LESSEE'S OR OPERATOR'S REPRENSENTATIVE AND CERTIFICATION:</u>

Representative

Name:

Tim Eaton

Address:

Newfield Production Company

Route 3, Box 3630 Myton, UT 84052

Telephone: (43

(435) 646-3721

#### Certification

1 11

Please be advised that NEWFIELD PRODUCTION COMPANY is considered to be the operator of well #T-5-9-16, Section 4, Township 9S, Range 16E: Lease UTU-73086 Duchesne County, Utah: and is responsible under the terms and conditions of the lease for the operations conducted upon the leased lands. Bond coverage is provided by, Federal Bond #WYB000493.

Lhereby certify that the proposed drill site and access route have been inspected, and I am familiar with the conditions which currently exist; that the statements made in this plan are true and correct to the best of my knowledge; and that the work associated with the operations proposed here will be performed by Newfield Production Company and its contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved. This statement is subject to the provisions of the 18 U.S.C. 1001 for the filing of a false statement.

2/28/11

Date

Estable -

Literaty States Reads Pages

though

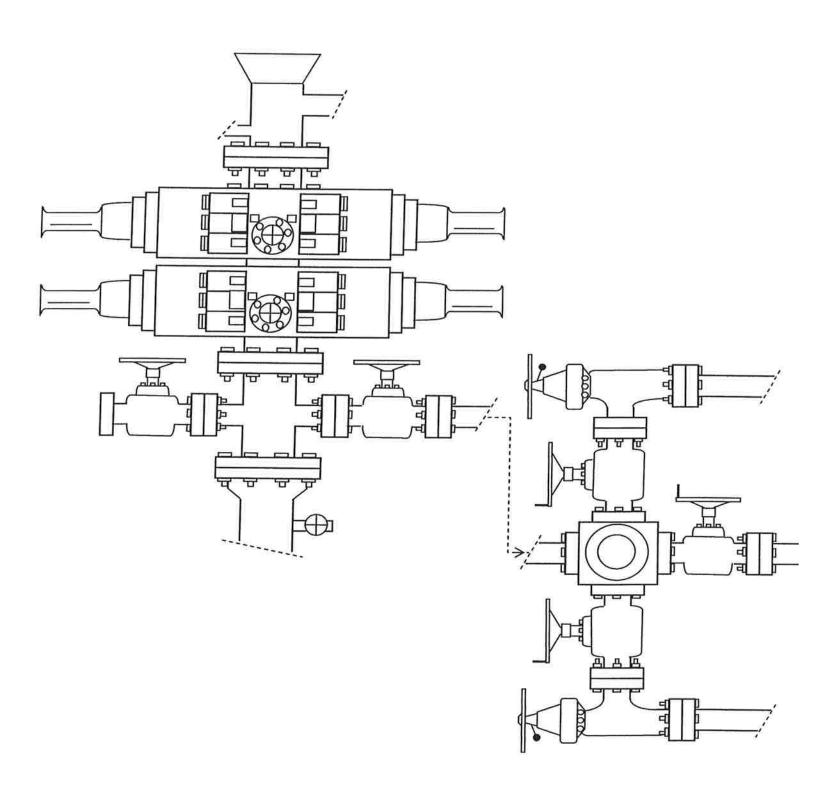
Mandie Crozier

Regulatory Specialist

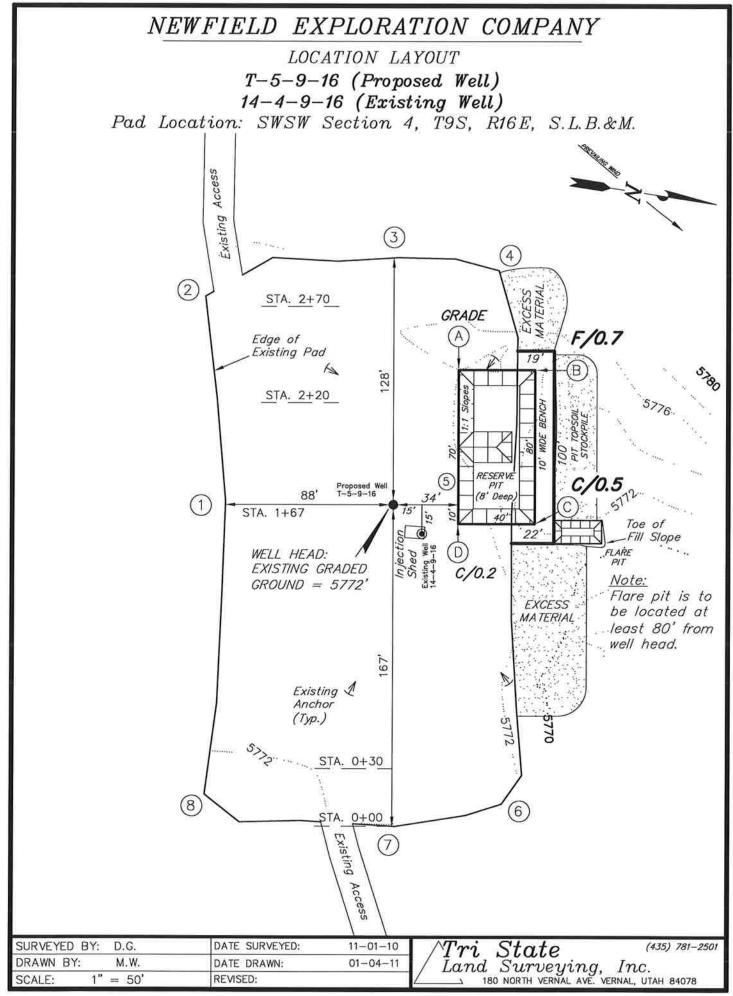
Newfield Production Company

# 2-M SYSTEM

# Blowout Prevention Equipment Systems



# **EXHIBIT C**



# NEWFIELD EXPLORATION COMPANY

CROSS SECTIONS

T-5-9-16 (Proposed Well)

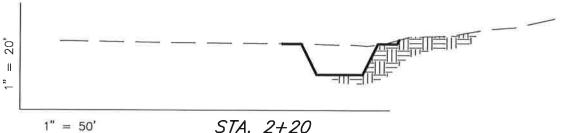
14-4-9-16 (Existing Well)

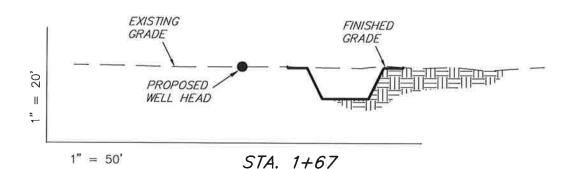
Pad Location: SWSW Section 4, T9S, R16E, S.L.B.&M.

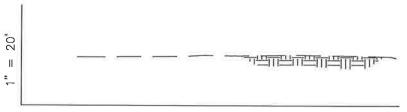


1'' = 50'

STA. 2+70







1'' = 50'

STA. 0+30

ESTIMATED EARTHWORK QUANTITIES (No Shrink or swell adjustments have been used) (Expressed in Cubic Yards)

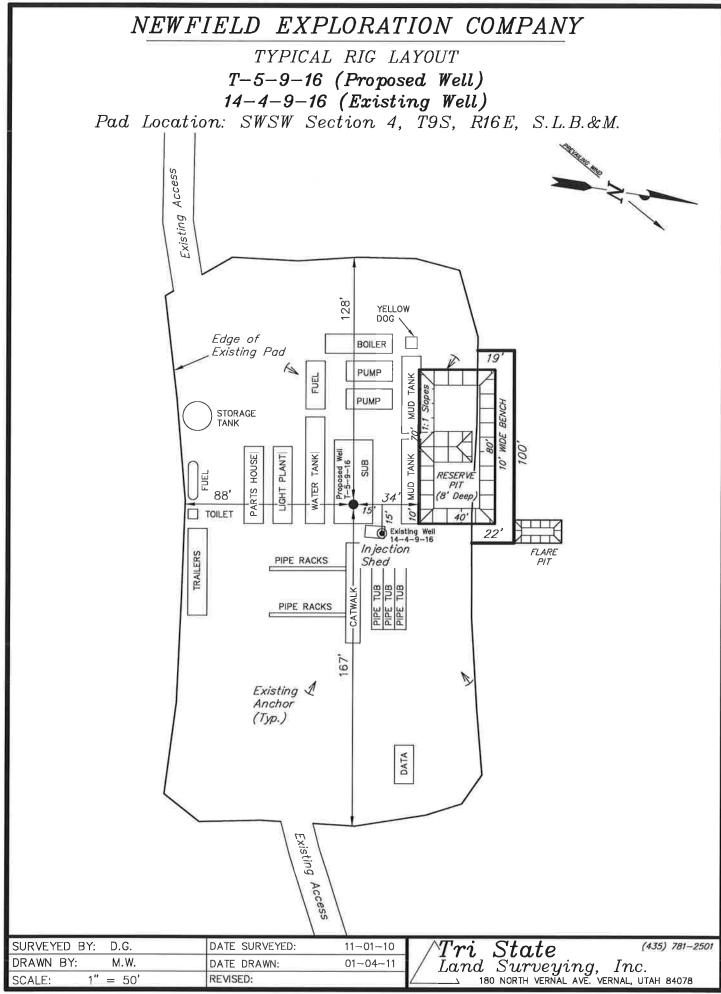
ITEM	CUT	FILL	6" TOPSOIL	EXCESS
PAD	0	10	Topsoil is not included	-10
PIT	640	0	in Pad Cut	640
TOTALS	640	10	120	630

NOTE: UNLESS OTHERWISE NOTED CUT SLOPES ARE AT 1:1 FILL SLOPES ARE AT 1.5:1

SURVEYED BY:	D.G.	DATE SURVEYED:	11-01-10
DRAWN BY:	M.W.	DATE DRAWN:	01-04-11
SCALE: 1"	= 50'	REVISED:	

TriState(435) 781-2501 Land Surveying, Inc.

180 NORTH VERNAL AVE. VERNAL, UTAH 84078





#### VIA ELECTRONIC DELIVERY

March 8, 2011

State of Utah, Division of Oil, Gas and Mining ATTN: Diana Mason P.O. Box 145801 Salt Lake City, UT 84114-5801

RE:

Directional Drilling

GMBU T-5-9-16

Greater Monument Butte (Green River) Unit

Surface Hole:

T9S-R16E Section 4: SWSW (UTU-73086)

699' FSL 595' FWL

At Target:

T9S-R16E Section 5: NESE (UTU-034217A)

1517' FSL 187' FEL

Duchesne County, Utah

Dear Ms. Mason:

Pursuant to the filing by Newfield Production Company (NPC) of an Application for Permit to Drill the above referenced well dated 2/28/11, a copy of which is attached, and in accordance with Oil and Gas Conservation Rule R649-3-11, NPC hereby submits this letter as notice of our intention to directionally drill this well.

The surface hole and target locations of this well are both within the boundaries of the Greater Monument Butte Unit (UTU-87538X), of which Newfield certifies that it is the operator. Further, Newfield certifies that all lands within 460 feet of the entire directional well bore are within the Greater Monument Butte Unit

NPC is permitting this well as a directional well in order to mitigate surface disturbance by utilizing preexiting roads and pipelines.

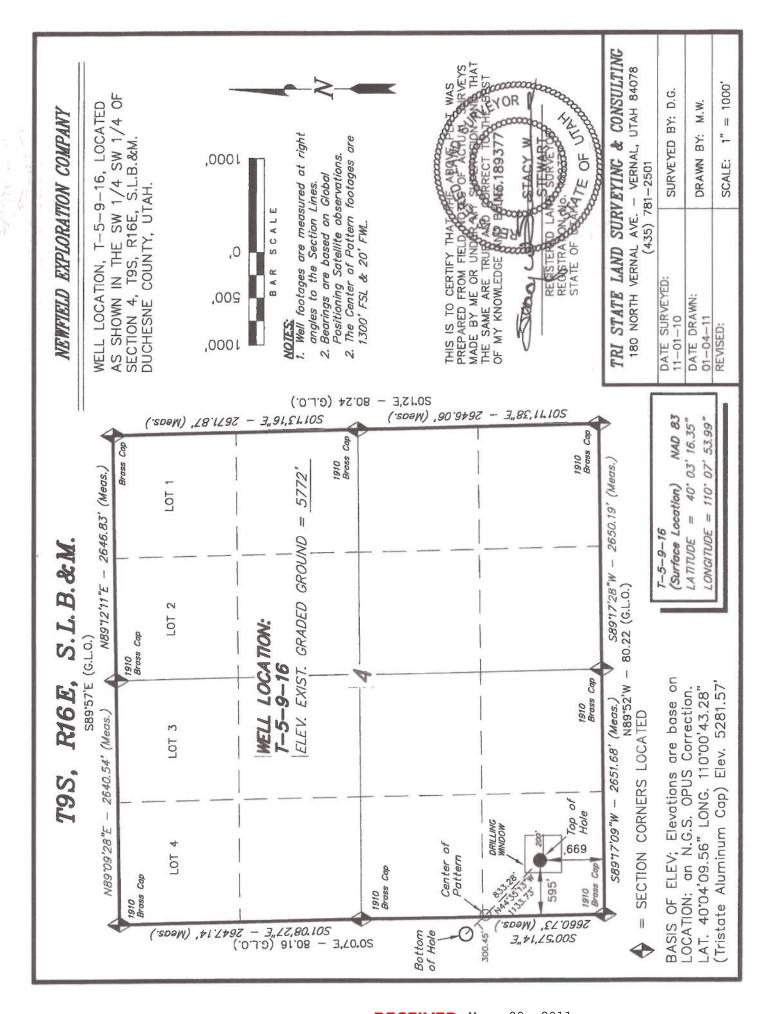
NPC hereby requests our application for permit to drill be granted pursuant to R649-3-11. If you have any questions or require further information, please contact the undersigned at 303-383-4197 or by email at sgillespie@newfield.com. Your consideration in this matter is greatly appreciated.

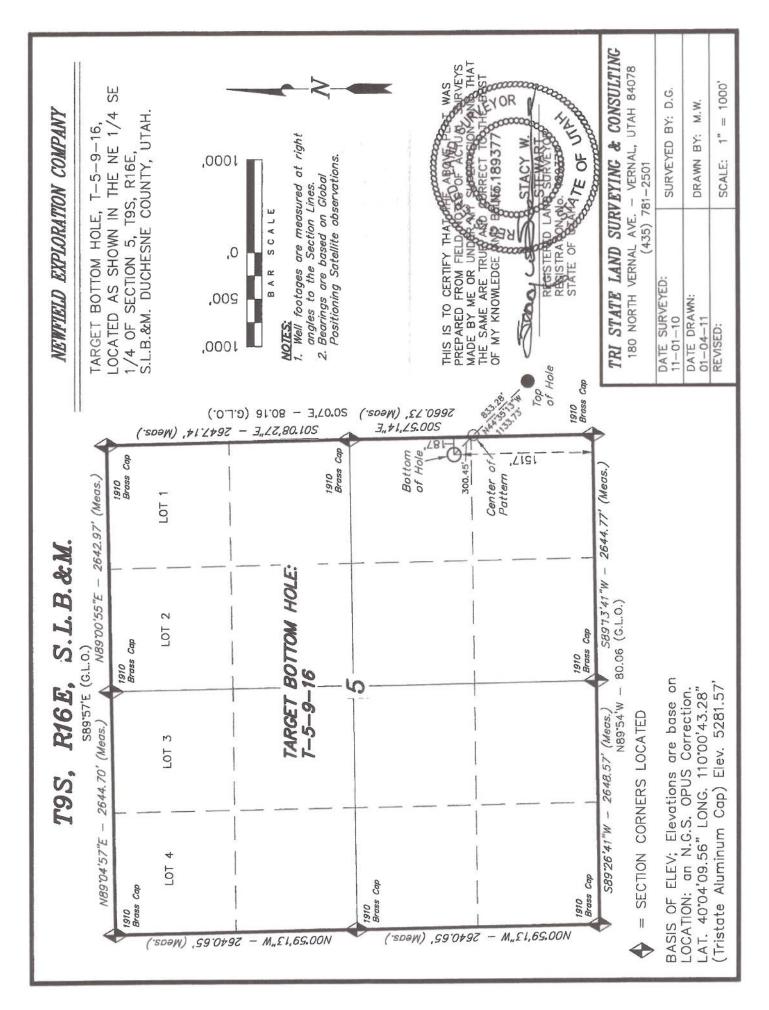
Sincerely,

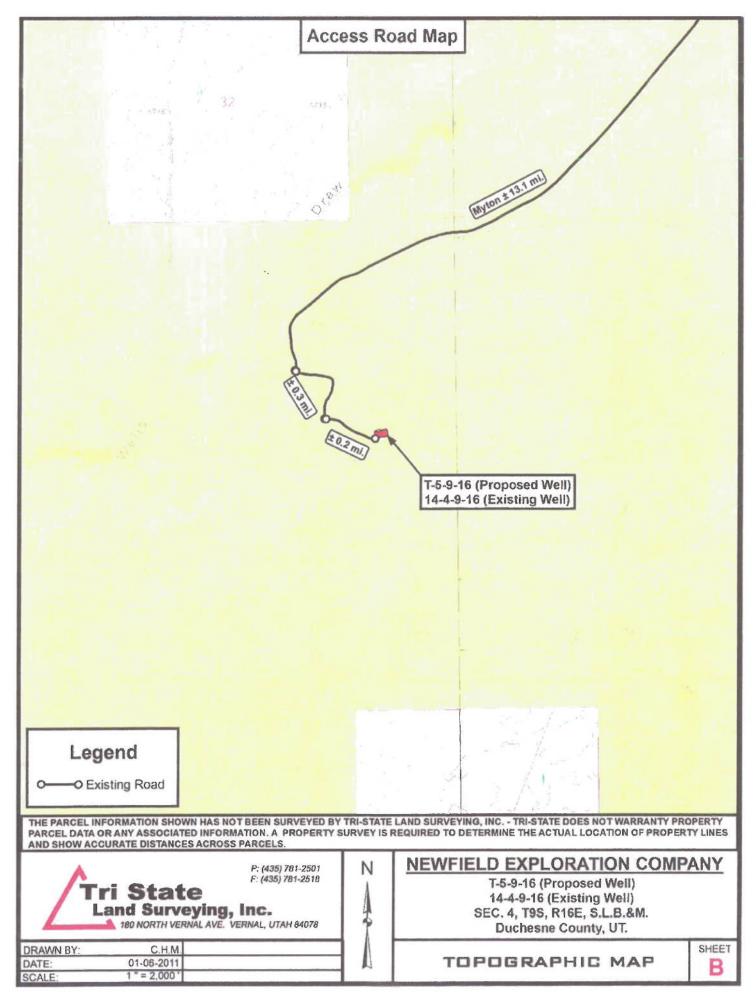
Newfield Production Company

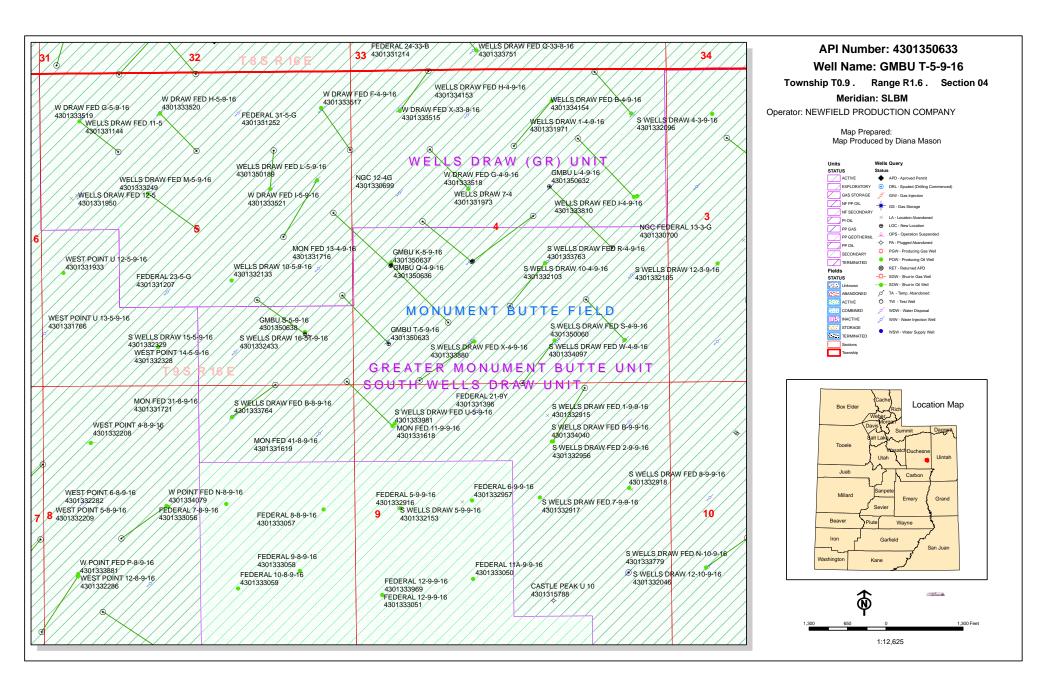
Shane Gillespie Land Associate

FORM APPROVED Form 3160-3 OMB No. 1004-0137 Expires July 31, 2010 (August 2007) UNITED STATES Lease Serial No. DEPARTMENT OF THE INTERIOR UTU-73086 BUREAU OF LAND MANAGEMENT If Indian, Allotee or Tribe Name APPLICATION FOR PERMIT TO DRILL OR REENTER 7 If Unit or CA Agreement, Name and No. **V** DRILL REENTER la. Type of work: Greater Monument Butte 8. Lease Name and Well No. Gas Well Other Multiple Zone ✓ Oil Well √ Single Zone GMBU T-5-9-16 lb. Type of Well: 9. API Well No. Name of Operator Newfield Production Company 3b. Phone No. (include area code) 10. Field and Pool, or Exploratory 3a. Address Route #3 Box 3630, Myton UT 84052 (435) 646-3721 Monument Butte 11. Sec., T. R. M. or Blk. and Survey or Area Location of Well (Report location clearly and in accordance with any State requirements.\*) At surface SW/SW 699' FSL 595' FWL Sec. 4, T9S R16E (UTU-73086) Sec. 4, T9S R16E At proposed prod. zone NE/SE 1517' FSL 187' FEL Sec. 5, T9S R16E (UTU-034217A) 13. State 12. County or Parish 14. Distance in miles and direction from nearest town or post office\* UT Duchesne Approximately 13.6 miles southwest of Myton, UT 15. Distance from proposed® 17. Spacing Unit dedicated to this well 16. No. of acres in lease location to nearest property or lease line, ft. Approx. 187' f/lse, NA f/unit (Also to nearest drig. unit line, if any) 160.00 20 Acres 20. BLM/BIA Bond No. on file 19. Proposed Depth 18. Distance from proposed location\* to nearest well, drilling, completed, applied for, on this lease, ft. WYB000493 Approx. 855' 6,422 22. Approximate date work will start 23. Estimated duration Elevations (Show whether DF, KDB, RT, GL, etc.) (7) days from SPUD to rig release 5772' GL 24. Attachments The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. I, must be attached to this form: Bond to cover the operations unless covered by an existing bond on file (see 1. Well plat certified by a registered surveyor. Item 20 above). 2. A Drilling Plan. Operator certification Such other site specific information and/or plans as may be required by the BLM. 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO must be filed with the appropriate Forest Service Office). Name (Printed Typed) Date 25. Signature Mandie Crozier Title Regulatory Specialist Name (Printed Typed) Date Approved by (Signature) Office Title Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon. Conditions of approval, if any, are attached. Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction. \*(Instructions on page 2) (Continued on page 2)









# **United States Department of the Interior**

#### BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO: 3160 (UT-922)

March 8, 2011

#### Memorandum

To: Assistant District Manager Minerals, Vernal District

From: Michael Coulthard, Petroleum Engineer

Subject: 2011 Plan of Development Greater Monument

Butte Unit, Duchesne and Uintah Counties,

Utah.

Pursuant to email between Diana Whitney, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management, the following horizontal well is planned for calendar year 2011 within the Greater Monument Butte Unit, Duchesne and Uintah Counties, Utah.

API# WELL NAME LOCATION

(Proposed PZ GREEN RIVER)

43-013-50626 GMBU Q-1-9-16 Sec 01 T09S R16E 1983 FSL 1990 FWL Sec 01 T09S R16E 1179 FSL 1170 FWL Sec 01 T09S R16E 1179 FSL 1170 FWL Sec 03 T09S R16E 1179 FSL 1170 FWL Sec 03 T09S R16E 1529 FNL 2510 FWL Sec 03 T09S R16E 1529 FNL 2510 FWL Sec 03 T09S R16E 1529 FNL 2510 FWL Sec 03 T09S R16E 1627 FNL 0893 FEL Sec 03 T09S R16E 1627 FNL 0893 FEL Sec 03 T09S R16E 2270 FSL 0879 FEL Sec 03 T09S R16E 2270 FSL 0879 FEL Sec 03 T09S R16E 2270 FSL 0879 FEL Sec 03 T09S R16E 2581 FSL 2423 FWL Sec 03 T09S R16E 2581 FSL 2423 FWL Sec 03 T09S R16E 1824 FNL 1881 FWL Sec 03 T09S R16E 1157 FNL 1044 FWL

43-013-50632 GMBU L-4-9-16 Sec 04 T09S R16E 1961 FNL 1969 FEL BHL Sec 04 T09S R16E 2292 FSL 0913 FEL

43-013-50633 GMBU T-5-9-16 Sec 04 T09S R16E 0699 FSL 0595 FWL

BHL Sec 05 T09S R16E 0599 F3L 0595 FWL

Page 2

API#	WELL NAME			LOCATION					
(Proposed PZ	GREEN	N RIVER)							
43-013-50634	GMBU						R16E R16E	_	
43-013-50635	GMBU		-				R16E R16E	 	 
43-013-50636	GMBU	~					R16E R16E		
43-013-50637	GMBU						R16E R16E	_	
43-013-50638	GMBU						R16E R16E		
43-013-50639	GMBU						R16E R16E		
43-013-50640	GMBU						R16E R16E		

This office has no objection to permitting the well at this time.

Michael L. Coulthard

Display is goned by Michael L. Coulthard

Discumblicable Loculthard of Minerals,
Discumbling Loculthard

bcc: File - Greater Monument Butte Unit Division of Oil Gas and Mining Central Files Agr. Sec. Chron Fluid Chron

MCoulthard:mc:3-8-11

## WORKSHEET APPLICATION FOR PERMIT TO DRILL

**APD RECEIVED:** 3/7/2011 **API NO. ASSIGNED:** 43013506330000

WELL NAME: GMBU T-5-9-16

**PHONE NUMBER:** 435 646-4825 **OPERATOR:** NEWFIELD PRODUCTION COMPANY (N2695)

**CONTACT:** Mandie Crozier

PROPOSED LOCATION: SWSW 04 090S 160E **Permit Tech Review:** 

> **SURFACE:** 0699 FSL 0595 FWL **Engineering Review:**

> **BOTTOM:** 1517 FSL 0187 FEL Geology Review:

**COUNTY: DUCHESNE** 

**LATITUDE:** 40.05453 **LONGITUDE:** -110.13104 **UTM SURF EASTINGS: 574118.00 NORTHINGS: 4433961.00** 

FIELD NAME: MONUMENT BUTTE

LEASE TYPE: 1 - Federal

**LEASE NUMBER: UTU-73086** PROPOSED PRODUCING FORMATION(S): GREEN RIVER SURFACE OWNER: 1 - Federal **COALBED METHANE: NO** 

**RECEIVED AND/OR REVIEWED: LOCATION AND SITING:**  PLAT R649-2-3. Unit: GMBU (GRRV) Bond: FEDERAL - WYB000493 **Potash** R649-3-2. General Oil Shale 190-5 Oil Shale 190-3 R649-3-3. Exception **Drilling Unit** Oil Shale 190-13 Board Cause No: Cause 213-11 Water Permit: 437478 **Effective Date:** 11/30/2009 **RDCC Review:** Siting: Suspends General Siting **Fee Surface Agreement Intent to Commingle** ■ R649-3-11. Directional Drill

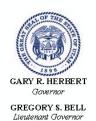
**Comments:** Presite Completed

**Commingling Approved** 

Stipulations: 4 - Federal Approval - dmason

15 - Directional - dmason 27 - Other - bhill

API Well No: 43013506330000



# State of Utah

DEPARTMENT OF NATURAL RESOURCES

MICHAEL R. STYLER
Executive Director

Division of Oil, Gas and Mining

JOHN R. BAZA
Division Director

## **Permit To Drill**

\*\*\*\*\*\*

Well Name: GMBU T-5-9-16 API Well Number: 43013506330000 Lease Number: UTU-73086

Surface Owner: FEDERAL Approval Date: 3/9/2011

#### **Issued to:**

NEWFIELD PRODUCTION COMPANY, Rt 3 Box 3630, Myton, UT 84052

#### **Authority:**

Pursuant to Utah Code Ann. §40-6-1 et seq., and Utah Administrative Code R649-3-1 et seq., the Utah Division of Oil, Gas and Mining issues conditions of approval, and permit to drill the listed well. This permit is issued in accordance with the requirements of Cause 213-11. The expected producing formation or pool is the GREEN RIVER Formation(s), completion into any other zones will require filing a Sundry Notice (Form 9). Completion and commingling of more than one pool will require approval in accordance with R649-3-22.

#### **Duration:**

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date

#### General:

Compliance with the requirements of Utah Admin. R. 649-1 et seq., the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

#### **Conditions of Approval:**

State approval of this well does not supercede the required federal approval, which must be obtained prior to drilling.

In accordance with Utah Admin. R.649-3-11, Directional Drilling, the operator shall submit a complete angular deviation and directional survey report to the Division within 30 days following completion of the well.

Production casing cement shall be brought up to or above the top of the unitized interval for the Greater Monument Butte Unit (Cause No. 213-11).

#### **Notification Requirements:**

The operator is required to notify the Division of Oil, Gas and Mining of the following actions during drilling of this well:

• Within 24 hours following the spudding of the well – contact Carol Daniels at 801-538-5284 (please leave a voicemail message if not available)
OR

submit an electronic sundry notice (pre-registration required) via the Utah Oil & Gas website at https://oilgas.ogm.utah.gov

API Well No: 43013506330000

## **Reporting Requirements:**

All reports, forms and submittals as required by the Utah Oil and Gas Conservation General Rules will be promptly filed with the Division of Oil, Gas and Mining, including but not limited to:

- Entity Action Form (Form 6) due within 5 days of spudding the well
- Monthly Status Report (Form 9) due by 5th day of the following calendar month
- Requests to Change Plans (Form 9) due prior to implementation
- Written Notice of Emergency Changes (Form 9) due within 5 days
- Notice of Operations Suspension or Resumption (Form 9) due prior to implementation
- Report of Water Encountered (Form 7) due within 30 days after completion
- Well Completion Report (Form 8) due within 30 days after completion or plugging

**Approved By:** 

For John Rogers Associate Director, Oil & Gas



(August 2007)

MAR U 3 2011

FORM APPROVED OMB No. 1004-0137 Expires July 31, 2010

UNITED STATES						
DEPARTMENT OF THE BUREAU OF LAND MAN	INTERIOR AND TOTAL AND THE		5. Lease Serial No. UTU-73086			
APPLICATION FOR PERMIT TO		, 0 1.11	6. If Indian, Allotee or Tr	ibe Name		
la. Type of work:	ER		7. If Unit or CA Agreemen Greater Monument			
lb. Type of Well: Oil Well Gas Well Other	✓ Single Zone  Multi	ple Zone	8. Lease Name and Well N GMBU T-5-9-16	vo.		
2. Name of Operator Newfield Production Company			9. API Well No. 43-013-50	633		
3a. Address Route #3 Box 3630, Myton UT 84052	3b. Phone No. (include area code) (435) 646-3721		10. Field and Pool, or Explor Monument Butte			
<ol> <li>Location of Well (Report location clearly and in accordance with an At surface SW/SW 699' FSL 595' FWL Sec. 4, T9S R<sup>2</sup></li> </ol>	· · · · · · · · · · · · · · · · · · ·		11. Sec., T. R. M. or Blk.and Sec. 4, T9S R16E	Survey or Area		
At proposed prod. zone NE/SE 1517' FSL 187' FEL Sec. 5	, T9S R16E (UTU-034217A)					
<ol> <li>Distance in miles and direction from nearest town or post office*</li> <li>Approximately 13.6 miles southwest of Myton, UT</li> </ol>			12. County or Parish  Duchesne	13. State		
5. Distance from proposed* location to nearest property or lease line ft Approx. 187' f/lse, NA f/unit	16. No. of acres in lease	17. Spacin	g Unit dedicated to this well			
property or lease line, ft. Approx. 187' f/lse, NA f/unit (Also to nearest drig. unit line, if any)	160.00		20 Acres			
8. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.  Approx. 855'	19. Proposed Depth 6,422'	ĺ	BIA Bond No. on file NYB000493			
l. Elevations (Show whether DF, KDB, RT, GL, etc.) 5772' GL	22. Approximate date work will star	)   ]	23. Estimated duration (7) days from SPUD to	rig release		
	24. Attachments		<i>(i)</i>			
ne following, completed in accordance with the requirements of Onshor Well plat certified by a registered surveyor. A Drilling Plan. A Surface Use Plan (if the location is on National Forest System I	4. Bond to cover the Item 20 above).	ne operation		ng bond on file (see		
SUPO must be filed with the appropriate Forest Service Office).	6. Such other site BLM.	specific info	rmation and/or plans as may l	be required by the		
5. Signature Karolio Crosin	Name (Printed/Typed) Mandie Crozier		Date	128/11		
tle Regulatory Specialist		-	17 man september 1991			
Sovet by (Signature) Vatalo action	Name (Printed/Typed)	Hm	Date	AUG 25		
tle Assistant Field Manager Lands & Mineral Resources	•		LD OFFICE			
application approval does not warrant or certify that the applicant holds onduct operations thereon. Conditions of approval, if any, are attached.	s legal or equitable title to those right	s in the subj	eet lease which would entitle t	he applicant to		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Continued on page 2)

NOS 1-25-2011 AFMSS#\_115 X S @ 283A



\*(Instructions on page 2)

RECEIVED SEP 0 6 2011

DIV. OF OIL, GAS & MINING



## UNITED STATES DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT **VERNAL FIELD OFFICE**

**VERNAL, UT 84078** 

(435) 781-4400



#### CONDITIONS OF APPROVAL FOR APPLICATION FOR PERMIT TO DRILL

Company:	Newfield Production Company	Location:	SWSW, Sec. 4, T9S, R16E, SLM
Well No:	GMBU T-5-9-16	Lease No:	UTU-73086
API No:	43-013-50633	Agreement:	Greater Monument Butte Unit

OFFICE NUMBER:

170 South 500 East

(435) 781-4400

**OFFICE FAX NUMBER: (435) 781-3420** 

### A COPY OF THESE CONDITIONS SHALL BE FURNISHED TO YOUR FIELD REPRESENTATIVE TO INSURE COMPLIANCE

All lease and/or unit operations are to be conducted in such a manner that full compliance is made with the applicable laws, regulations (43 CFR Part 3160), and this approved Application for Permit to Drill including Surface and Downhole Conditions of Approval. The operator is considered fully responsible for the actions of his subcontractors. A copy of the approved APD must be on location during construction, drilling, and completion operations. This permit is approved for a two (2) year period, or until lease expiration, whichever occurs first. An additional extension, up to two (2) years, may be applied for by sundry notice prior to expiration.

#### NOTIFICATION REQUIREMENTS

Location Construction (Notify Environmental Scientist)	-	Forty-Eight (48) hours prior to construction of location and access roads.
Location Completion (Notify Environmental Scientist)		Prior to moving on the drilling rig.
Spud Notice (Notify Petroleum Engineer)	-	Twenty-Four (24) hours prior to spudding the well.
Casing String & Cementing (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to running casing and cementing all casing strings to: ut vn opreport@blm.gov.
BOP & Related Equipment Tests (Notify Supv. Petroleum Tech.)	-	Twenty-Four (24) hours prior to initiating pressure tests.
First Production Notice (Notify Petroleum Engineer)	-	Within Five (5) business days after new well begins or production resumes after well has been off production for more than ninety (90) days.

Page 2 of 7 Well: GMBU T-5-9-16 8/24/2011

## SURFACE USE PROGRAM CONDITIONS OF APPROVAL (COAs)

- All new and replacement internal combustion gas field engines of less than or equal to 300 designrated horsepower must not emit more than 2 gms of NO<sub>x</sub> per horsepower-hour. This requirement does not apply to gas field engines of less than or equal to 40 design-rated horsepower.
- All and replacement internal combustion gas field engines of greater than 300 design rated horsepower must not emit more than 1.0 gms of NO<sub>x</sub> per horsepower-hour.
- If there is an active Gilsonite mining operation within 2 miles of the well location, operator shall notify the Gilsonite operator at least 48 hours prior to any blasting during construction.
- If paleontological materials are uncovered during construction, the operator is to immediately stop
  work and contact the Authorized Officer (AO). A determination will be made by the AO as to what
  mitigation may be necessary for the discovered paleontologic material before construction can
  continue.
- After cessation of drilling and completion operations, any visible or measurable layer of oil must be removed from the surface of the reserve pit and the pit kept free of oil.
- Pits must be free of oil and other liquid and solid wastes prior to filling. Pit liners must not be breached (cut) or filled (squeezed) while still containing fluids. The pit liner must be removed to the solids level or treated to prevent its reemergence to the surface or its interference with long-term successful revegetation.

<u>If</u> construction and drilling is anticipated during any of the following wildlife seasonal or spatial restrictions, a qualified consulting firm biologist must be contacted 2 weeks prior in order to conduct applicable surveys using an accepted protocol prior to any ground disturbing activities.

- Mountain plover surveys will be conducted to protocol by a professional environmental consulting
  firm biologist prior to any ground disturbing activities. Reports from survey results must be
  reviewed by a BLM authorized officer prior to proceeding with the project. A seasonal restriction
  for all ground disturbing activities in mountain plover habitat from May 1-June 15 is required.
- Install hospital mufflers where possible to reduce noise impacts to wildlife.

#### Reclamation

- Reclamation will be completed in accordance with the Newfield Exploration Company Castle Peak and Eight Mile Flat Reclamation Plan on file with the Vernal Field Office of the BLM.
- The reclamation seed mix will incorporate low growing grasses, instead of crested wheatgrass, which negatively impacts mountain plover habitat.
- Appropriate erosion control and revegetation measures will be employed. In areas with unstable
  soils where seeding alone may not adequately control erosion, grading will be used to minimize
  slopes and water bars will be installed on disturbed slopes. Erosion control efforts will be monitored
  by Newfield and, if necessary, modifications will be made to control erosion.

Page 3 of 7 Well: GMBU T-5-9-16 8/24/2011

## **Monitoring and Reporting**

- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) that designates the proposed site-specific monitoring and reference sites chosen for the location. A description of the proposed sites shall be included, as well as a map showing the locations of the proposed sites.
- The operator shall submit a Sundry Notice (Form 3160-5) to the BLM Authorized Officer (AO) 3 growing seasons after reclamation efforts have occurred evaluating the status of the reclaimed areas in order to determine whether the BLM standards set forth in the Green River District Reclamation Guidelines have been met (30% or greater basal cover).

Page 4 of 7 Well: GMBU T-5-9-16 8/24/2011

# DOWNHOLE PROGRAM CONDITIONS OF APPROVAL (COAs)

#### SITE SPECIFIC DOWNHOLE COAs:

 Newfield Production Co. shall comply with all applicable requirements in the SOP (version: "Greater Monument Butte Green River Development Program", June 24, 2008). The operator shall also comply with applicable laws and regulations; with lease terms, Onshore Oil and Gas Orders, NTL's; and with other orders and instructions of the authorized officer.

All provisions outlined in Onshore Oil & Gas Order #2 Drilling Operations shall be strictly adhered to. The following items are emphasized:

#### DRILLING/COMPLETION/PRODUCING OPERATING STANDARDS

- The spud date and time shall be reported orally to Vernal Field Office within 24 hours of spudding.
- Notify Vernal Field Office Supervisory Petroleum Engineering Technician at least 24 hours in advance of casing cementing operations and BOPE & casing pressure tests.
- All requirements listed in Onshore Order #2 III. E. Special Drilling Operations are applicable for air drilling of surface hole.
- Blowout prevention equipment (BOPE) shall remain in use until the well is completed or abandoned. Closing unit controls shall remain unobstructed and readily accessible at all times. Choke manifolds shall be located outside of the rig substructure.
- All BOPE components shall be inspected daily and those inspections shall be recorded in the daily drilling report. Components shall be operated and tested as required by Onshore Oil & Gas Order No. 2 to insure good mechanical working order. All BOPE pressure tests shall be performed by a test pump with a chart recorder and <u>NOT</u> by the rig pumps. Test shall be reported in the driller's log.
- BOP drills shall be initially conducted by each drilling crew within 24 hours of drilling out from under the surface casing and weekly thereafter as specified in Onshore Oil & Gas Order No. 2.
- Casing pressure tests are required before drilling out from under all casing strings set and cemented in place.
- No aggressive/fresh hard-banded drill pipe shall be used within casing.
- Cement baskets shall not be run on surface casing.
- The operator must report all shows of water or water-bearing sands to the BLM. If flowing water is
  encountered it must be sampled, analyzed, and a copy of the analyses submitted to the BLM Vernal
  Field Office.
- The operator must report encounters of all non oil & gas mineral resources (such as Gilsonite, tar sands, oil shale, trona, etc.) to the Vernal Field Office, in writing, within 5 working days of each encounter. Each report shall include the well name/number, well location, date and depth (from KB

Page 5 of 7 Well: GMBU T-5-9-16 8/24/2011

or GL) of encounter, vertical footage of the encounter and, the name of the person making the report (along with a telephone number) should the BLM need to obtain additional information.

- A complete set of angular deviation and directional surveys of a directional well will be submitted to the Vernal BLM office engineer within 30 days of the completion of the well.
- While actively drilling, chronologic drilling progress reports shall be filed directly with the BLM, Vernal Field Office on a weekly basis in sundry, letter format or e-mail to the Petroleum Engineers until the well is completed.
- A cement bond log (CBL) will be run from the production casing shoe to the top of cement and shall be utilized to determine the bond quality for the production casing. Submit a field copy of the CBL to this office.
- Please submit an electronic copy of all other logs run on this well in LAS format to UT\_VN\_Welllogs@BLM.gov. This submission will supersede the requirement for submittal of paper logs to the BLM.
- There shall be no deviation from the proposed drilling, completion, and/or workover program as approved. Safe drilling and operating practices must be observed. Any changes in operation must have prior approval from the BLM Vernal Field Office.

Page 6 of 7 Well: GMBU T-5-9-16 8/24/2011

#### **OPERATING REQUIREMENT REMINDERS:**

- All wells, whether drilling, producing, suspended, or abandoned, shall be identified in accordance with 43 CFR 3162.6. There shall be a sign or marker with the name of the operator, lease serial number, well number, and surveyed description of the well.
- For information regarding production reporting, contact the Office of Natural Resources Revenue (ONRR) at www.ONRR.gov.
- Should the well be successfully completed for production, the BLM Vernal Field office must be
  notified when it is placed in a producing status. Such notification will be by written communication
  and must be received in this office by not later than the fifth business day following the date on
  which the well is placed on production. The notification shall provide, as a minimum, the following
  informational items:
  - Operator name, address, and telephone number.
  - Well name and number.
  - Well location (¼¼, Sec., Twn, Rng, and P.M.).
  - Date well was placed in a producing status (date of first production for which royalty will be paid).
  - o The nature of the well's production, (i.e., crude oil, or crude oil and casing head gas, or natural gas and entrained liquid hydrocarbons).
  - The Federal or Indian lease prefix and number on which the well is located; otherwise the non-Federal or non-Indian land category, i.e., State or private.
  - Unit agreement and/or participating area name and number, if applicable.
  - o Communitization agreement number, if applicable.
- Any venting or flaring of gas shall be done in accordance with Notice to Lessees (NTL) 4A and needs prior approval from the BLM Vernal Field Office.
- All undesirable events (fires, accidents, blowouts, spills, discharges) as specified in NTL 3A will be reported to the BLM, Vernal Field Office. Major events, as defined in NTL3A, shall be reported verbally within 24 hours, followed by a written report within 15 days. "Other than Major Events" will be reported in writing within 15 days. "Minor Events" will be reported on the Monthly Report of Operations and Production.
- Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (BLM Form 3160-4) shall be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3162.4-1. Two copies of all logs run, core descriptions, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, shall be filed on BLM Form 3160-4. Submit with the well completion report a geologic report including, at a minimum, formation tops, and a summary and conclusions. Also include deviation surveys, sample descriptions, strip logs, core data, drill stem test data, and results of production tests if performed. Samples (cuttings, fluid,

Page 7 of 7 Well: GMBU T-5-9-16 8/24/2011

and/or gas) shall be submitted only when requested by the BLM, Vernal Field Office.

- All off-lease storage, off-lease measurement, or commingling on-lease or off-lease, shall have prior written approval from the BLM Vernal Field Office.
- Oil and gas meters shall be calibrated in place prior to any deliveries. The BLM Vernal Field Office
  Petroleum Engineers will be provided with a date and time for the initial meter calibration and all
  future meter proving schedules. A copy of the meter calibration reports shall be submitted to the
  BLM Vernal Field Office. All measurement facilities will conform to the API standards for liquid
  hydrocarbons and the AGA standards for natural gas measurement. All measurement points shall
  be identified as the point of sale or allocation for royalty purposes.
- A schematic facilities diagram as required by Onshore Oil & Gas Order No. 3 shall be submitted to
  the BLM Vernal Field Office within 30 days of installation or first production, whichever occurs first.
  All site security regulations as specified in Onshore Oil & Gas Order No. 3 shall be adhered to. All
  product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in
  accordance with Onshore Oil & Gas Order No. 3.
- Any additional construction, reconstruction, or alterations of facilities, including roads, gathering
  lines, batteries, etc., which will result in the disturbance of new ground, shall require the filing of a
  suitable plan and need prior approval of the BLM Vernal Field Office. Emergency approval may be
  obtained orally, but such approval does not waive the written report requirement.
- No location shall be constructed or moved, no well shall be plugged, and no drilling or workover
  equipment shall be removed from a well to be placed in a suspended status without prior approval
  of the BLM Vernal Field Office. If operations are to be suspended for more than 30 days, prior
  approval of the BLM Vernal Field Office shall be obtained and notification given before resumption
  of operations.
- Pursuant to Onshore Oil & Gas Order No. 7, this is authorization for pit disposal of water produced from this well for a period of 90 days from the date of initial production. A permanent disposal method must be approved by this office and in operation prior to the end of this 90-day period. In order to meet this deadline, an application for the proposed permanent disposal method shall be submitted along with any necessary water analyses, as soon as possible, but no later than 45 days after the date of first production. Any method of disposal which has not been approved prior to the end of the authorized 90-day period will be considered as an Incident of Noncompliance and will be grounds for issuing a shut-in order until an acceptable manner for disposing of said water is provided and approved by this office.
- Unless the plugging is to take place immediately upon receipt of oral approval, the Field Office Petroleum Engineers must be notified at least 24 hours in advance of the plugging of the well, in order that a representative may witness plugging operations. If a well is suspended or abandoned, all pits must be fenced immediately until they are backfilled. The "Subsequent Report of Abandonment" (Form BLM 3160-5) must be submitted within 30 days after the actual plugging of the well bore, showing location of plugs, amount of cement in each, and amount of casing left in hole, and the current status of the surface restoration.

## BLM - Vernal Field Office - Notification Form

Spud Notice − Spud is the initial spudding of the well, not drilling out below a casing string.  Date/Time 10/28/11 9:00 AM ☑ PM ☐  Casing − Please report time casing run starts, not cementing times.  ☑ Surface Casing ☐ Intermediate Casing ☐ Production Casing ☐ Liner ☐ Other  Date (Time 10/20/14 and 2004 AM ☐ DATE ☐ DATE ☐ Other
<ul> <li>Casing – Please report time casing run starts, not cementing times.</li> <li>✓ Surface Casing</li> <li>✓ Intermediate Casing</li> <li>✓ Production Casing</li> <li>✓ Liner</li> <li>✓ Other</li> </ul>
times.  Surface Casing  Intermediate Casing  Production Casing  Liner  Other
D   /T:   40/00/44     0.00   AM
Date/Time $\underline{10/28/11}$ $\underline{3:00}$ AM $\square$ PM $\boxtimes$
BOPE Initial BOPE test at surface casing point BOPE test at intermediate casing point 30 day BOPE test Other  Date/Time AM PM
Remarks

OPERATOR: NEWFIELD PRODUCTION COMPANY ADDRESS: RT. 3 BOX 3630

OPERATOR ACCT. NO.

N2695

MYTON, UT 84052

ACTION CODE	CURRENT	NEW	API NUMBER	WELL NAME	T		WELL LC	CATION	<del></del>	CIPM IVA	T
CODE	ENTITY NO.	ENTITY NO	<del>/</del>		aq	SC	TP	RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4301350639 GMBU H-15-9-16 NV				98	16E	DUCHESNE	11/2/2011	11/9/11
WELL 1 C	GRW			BHL = SENL	)						
ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME		WE SC	LL LOCATIO	ON RG	COUNTY	SPUD DATE	EFFECTIVE DATE
В	99999	17400	4301350706	GMBU W-33-8-16	NWNE	14	95		DUCHESNE	11/1/2011	11/9/11
(	GRRV	T		BHL = SWSE	T85	? 	Sec	, 3	<b>3</b>	- Andrews	
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	ug -	SC	WELL LO		COUNTY	SPUD DATE	EFFECTIVE
В	99999	17400	4301350640	GMBU I-15-9-16	NWNE	15	98	16E	DUCHESNE	10/31/2011	11/9/11
	SRRV	<b>-</b>		BHL-SENE							7 7
ACTION CODE	CURRENT ENTITY NO.	NEW ENTITY NO.	API NUMBER	WELL NAME	QQ	sc	WELL LO	CATION RG	COUNTY	SPUD DATE	EFFECTIVE
В	99999	17400	4301350636	GMBU Q-4-9-16	NWSW	4			DUCHESNE	10/27/2011	11/9/11
	GRRU			BHL=SESU	$\mathcal{U}$					4	
ACTION	CURRENT ENTITY NO	NEW ENTITY NO.	API NUMBER	WELL NAME	aa	sc	WELL LO		2511157	SPUD	EFFECTIVE
В	99999	17400	4301350637	GMBU K-5-9-16	NWSW	4		16E	DUCHESNE	10/28/2011	11/9/11
	GRRV			BH Sec	5 S	巨人	IE				,
ACTION CODE	CURRENT ENTITY NO	NEW ENTITY NO	API NUMBER	WELL NAME	ga	sc	WELL LO	CATION RG	COUNTY	SPUD	EFFECTIVE
В	99999	17400	4301350633	GMBU T-5-9-16	swsw	4		16E	DUCHESNE	10/28/2011	11/9/11
ACTION	GRRU		B	H= Sec 5 NE	ESE						,
A - 1	CODES (See instructions on bac new entity for new well (single) well to existing entity (group or	well only)		ororiveD	1				+//		Jentri Park

NOTE: Use COMMENT section to explain why each Action Code was selected

C - from one existing entity to another existing entity D - well from one existing entity to a new entity E - ther (explain in comments section)

RECEIVED

NOV 0 3 2011

Production Clerk

11/03/11

FORM 3160-5 **UNITED STATES** FORM APPROVED OMB No. 1004-0137 (August 2007) DEPARTMENT OF THE INTERIOR Expires: July 31,2010 **BUREAU OF LAND MANAGEMENT** 5. Lease Serial No. SUNDRY NOTICES AND REPORTS ON WELLS USA UTU-73086 Do not use this form for proposals to drill or to re-enter an 6. If Indian, Allottee or Tribe Name. abandoned well. Use Form 3160-3 (APD) for such proposals. SUBMIT IN TRIPLICATE - Other Instructions on page 2 7. If Unit or CA/Agreement, Name and/or GMBU 1. Type of Well Oil Well Gas Well Other 8. Well Name and No. 2. Name of Operator GMBU T-5-9-16 NEWFIELD PRODUCTION COMPANY 9. API Well No. 3a. Address Route 3 Box 3630 3b. Phone (include are code) 4301350633 Myton, UT 84052 10. Field and Pool, or Exploratory Area 4. Location of Well (Footage, Sec., T., R., M., or Survey Description) **GREATER MB UNIT** 0699 FSL 0595 FWL 11. County or Parish, State Section 5 T9S R16E DUCHESNE, UT 12. CHECK APPROPRIATE BOX(ES) TO INIDICATE NATURE OF NOTICE, OR OTHER DATA TYPE OF SUBMISSION TYPE OF ACTION ■ Water Shut-Off Acidize Deepen Production (Start/Resume) Notice of Intent Alter Casing Fracture Treat Reclamation Well Integrity **New Construction** Casing Repair Recomplete Subsequent Report Other Change Plans Plug & Abandon Temporarily Abandon Spud Notice Final Abandonment Convert to Injector Plug Back Water Disposal

13. Describe Proposed or Completed Operation: (Clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof. If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones. Attach the Bond under which the work will be performed or provide the Bond No. on file with BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, a Form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

On 10/28/11 MIRU Ross #29. Spud well @10:00 AM. Drill 325' of 12 1/4" hole with air mist. TIH W/ 7 Jt's 8 5/8" J-55 24# csgn. Set @ 329.88. On 11/1/11 cement with 160 sks of class "G" w/ 2% CaCL2 + 0.25#/sk Cello- Flake Mixed @ 15.8ppg w/ 1.17ft3/sk yield. Returned 5 barrels cement to pit. WOC.

I hereby certify that the foregoing is true and correct (Printed/ Typed)  Branden Arnold	Title		
Signature J. Ho, A	Date 11/02/2011		
THIS SPACE FOR FED	ERAL OR STATE OFFIC	E USE	
Approved by	Title	Date	
Conditions of approval, if any, are attached. Approval of this notice does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.	Office		

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious and fraudulent statements or representations as to any matter within its jurisdiction

## **NEWFIELD PRODUCTION COMPANY - CASING & CEMENT REPORT**

			8 5/8"	CASING SET AT	Γ	329.28	. ,		
LAST CASING	14	SET AT	8					Exploration	Company
DATUM				-	WELL			4.73.44	
DATUM TO CUT				-		_	Monumer		<del> </del>
DATUM TO BRA					CONTRAC	TOR & RIG	<u>#</u>	Ross # 29	
TD DRILLER		•	SER						
HOLE SIZE	12 1/4"			•					
LOG OF CASING	3 STRING:								
PIECES	OD	ITEM - M	AKE - DES	CRIPTION	WT/FT	GRD	THREAD	CONDT	LENGTH
1		wellhead	<u></u>					Α	1.42
7	8 5/8"	casing (she	oe jt 45.22)		24	J-55	STC	Α	316.56
1		guide shoe						Α	0.9
	-								
CASING INVENT	FORY BAL.		FEET	JTS	TOTAL LE	NGTH OF	STRING		318.88
TOTAL LENGTH	OF STRIN	G	318.88	7	LESS CUT	OFF PIEC	E		2
LESS NON CSG	. ITEMS		2.32		PLUS DAT	UM TO T/C	CUT OFF CS	G	13
PLUS FULL JTS	. LEFT OUT	T	0		CASING S	ET DEPTH			329.88
	TOTAL		316.56	7	]				
TOTAL CSG. DE	L. (W/O TH	IRDS)			] } сомра	ARE			
7	riming .				]				
BEGIN RUN CS	<del></del>	Spud	10:00 AM	10/28/2011	GOOD CIF	RC THRU J	OB	Yes	
CSG. IN HOLE			5:00 AM	10/28/2011	Bbls CMT	CIRC TO S	URFACE_	5	
BEGIN CIRC			12:04 PM	11/1/2011	RECIPRO	CATED PIP	l <u>No</u>		
BEGIN PUMP CI	ИΤ		12:13 PM	11/1/2011					
BEGIN DSPL. CI	MT		12:22 PM	11/1/2011	BUMPED F	PLUG TO _	474		

12:28 PM

PLUG DOWN

11/1/2011

CEMENT USED	)	CI	EMENT COMPANY-	BJ		
STAGE	# SX	CI	EMENT TYPE & ADDIT	TIVES		
1	160	Class "G"+2%CaCl Mixed@ 15	5.8ppg W/1.17 yield returned	I 5bbls to pit		
	-		<del> </del>			
			***			
	-					
	<del> </del>					
			***************************************			
	<del>                                     </del>			· · · · · · · · · · · · · · · · · · ·		
CENTRALIZER	& SCRATO	CHER PLACEMENT		SHOW MAKE 8	& SPACIN	NG
		ond and third for a total of	of three.			
L		<u> </u>				
COMPANY REF	PRESENTA	TIVE Branden Ar	nold		DATE_	11/1/2011

Sundry Number: 22314 API Well Number: 43013506330000

	STATE OF UTAH			FORM 9
ι	DEPARTMENT OF NATURAL RESOURG DIVISION OF OIL, GAS, AND MIN			5.LEASE DESIGNATION AND SERIAL NUMBER: UTU-73086
SUNDR	RY NOTICES AND REPORTS	ON W	ELLS	6. IF INDIAN, ALLOTTEE OR TRIBE NAME:
	pposals to drill new wells, significantly reenter plugged wells, or to drill horizon for such proposals.			7.UNIT or CA AGREEMENT NAME: GMBU (GRRV)
1. TYPE OF WELL Oil Well				8. WELL NAME and NUMBER: GMBU T-5-9-16
2. NAME OF OPERATOR: NEWFIELD PRODUCTION CO	DMPANY			9. API NUMBER: 43013506330000
3. ADDRESS OF OPERATOR: Rt 3 Box 3630 , Myton, UT,	, 84052 435 646-482		NUMBER:	9. FIELD and POOL or WILDCAT: MONUMENT BUTTE
4. LOCATION OF WELL FOOTAGES AT SURFACE: 0699 FSL 0595 FWL				COUNTY: DUCHESNE
QTR/QTR, SECTION, TOWNSH	HIP, RANGE, MERIDIAN: 04 Township: 09.0S Range: 16.0E Meri	idian: S		STATE: UTAH
11. CHEC	K APPROPRIATE BOXES TO INDICA	TE NAT	URE OF NOTICE, REPOR	T, OR OTHER DATA
TYPE OF SUBMISSION			TYPE OF ACTION	
	ACIDIZE	ALTE	R CASING	CASING REPAIR
NOTICE OF INTENT Approximate date work will start:	CHANGE TO PREVIOUS PLANS	CHAN	NGE TUBING	CHANGE WELL NAME
	CHANGE WELL STATUS	□ сом	MINGLE PRODUCING FORMATIONS	CONVERT WELL TYPE
SUBSEQUENT REPORT Date of Work Completion:	DEEPEN	FRAC	CTURE TREAT	NEW CONSTRUCTION
	OPERATOR CHANGE	PLUG	G AND ABANDON	PLUG BACK
SPUD REPORT	✓ PRODUCTION START OR RESUME		AMATION OF WELL SITE	RECOMPLETE DIFFERENT FORMATION
Date of Spud:	REPERFORATE CURRENT FORMATION		TRACK TO REPAIR WELL	TEMPORARY ABANDON
✓ DRILLING REPORT	L TUBING REPAIR		OR FLARE	☐ WATER DISPOSAL
Report Date: 1/13/2012	WATER SHUTOFF	□ SITA	STATUS EXTENSION	APD EXTENSION
.,,.,,,,,,	WILDCAT WELL DETERMINATION	OTHE	ER	OTHER:
The above well w	completed operations. Clearly show vas placed on production or hours.	n 01/1:	3/2012 at 18:00	epths, volumes, etc.  Accepted by the Utah Division of Oil, Gas and Mining FOR RECORD ONLY January 18, 2012
NAME (PLEASE PRINT) Jennifer Peatross	<b>PHONE NUME</b> 435 646-4885		ITLE Production Technician	
SIGNATURE N/A			<b>ATE</b> /17/2012	



### **UNITED STATES** DEPARTMENT OF THE INTERIOR BUREAU OF LAND MANAGEMENT

FORM APPROVED OMB NO. 1004-0137 Expires: July 31, 2010

	WI	ELL C	OMPLI	ETION	OR R	ECOMPLE	TION REP	ORT	AND LO	G			ease Seri J-73086		
a. Type of V b. Type of C	Vell Completion:	✓ Oil ✓ Ne	l Well w Well	Gas Worl	Well k Over	Dry Deepen	Other Plug Back	☐ Diff	E. Resvr.,			6. If	Indian,	Allottee or T	ribe Name
		Oth											nit or CA		Name and No.
2. Name of ONEWFIELD	perator EXPLOF	RATION		ANY								8. L		ne and Well	No.
3. Address	1401 17TH S	·			10202				No. (include	area code	)	9. A	FI Well	No.	· · · · · · · · · · · · · · · · · · ·
						ance with Feder		35) 646 ts)*	-3721			10.		l Pool or Exp	oloratory
At surface	. cool <b>E</b> OI	9 505	- F1A(1 (C		050 4	T00 D405	(1 <del>17</del> 11.70000							NT BUTTE R., M., on B	lock and
7 it Surrace	, paa Lor	- & 595°	FVVL (S	ovv/Svv)	SEC. 4	, T9S, R16E	(U1U-73086	))					Survey of	- A	4, T9S, R16E
At top pro-						WL (SW/SW)						12.	County o		13. State
At total de		FSL &	2 \	L (NE/SE	E) SEC	. 5, T9S, R16	E (UTU-034	217A) [	3HL lov	1 HSW	١	DUG	CHESN	E	UT
14. Date Spt 10/28/201	iaaea		115. 1	Jate L.D.	Reached	ì	116. <u>D</u>	ate Comp	oletea (J1/1	16/2012				ns (DF, RKE	B, RT, GL)*
18. Total De	pth: MD	6430'		01/2011	19. Plu	g Back T.D.:	MD 6353'	D&A		dy to Prod. Depth Br			MD	785' KB	
21. Type El	TVI ectric & Oth	er Mecha	- 631 nical Logs	Run (Sul	bmit cop	v of each)	TVD <b>623</b>	4	22.	Was wel	cored?	ZN	TVD	Yes (Submit	analysis)
DUAL IND	GRD SP	, COMF	P. DENS	ITY,CO	MP. NE	UTRON,GR,	CALIPER, C	MT BO	NDX	Was DS	run? al Survey	<b>✓</b> N	[o 🔲	Yes (Submit Yes (Submit	report)
23. Casing	and Liner R	ecord (F	Report all	strings se	t in well	7	I a. a							- Cuolina	сору,
Hole Size	Size/Gra	ide W	Vt. (#/ft.)	Top (	(MD)	Bottom (MD	) Stage Ce Dep		No. of Type of		Slurry (BE		Ceme	ent Top*	Amount Pulled
12-1/4" 7-7/8"	8-5/8" J- 5-1/2" J-		4# 5.5#	0		325' 6400'			160 CLA				001		THE TOTAL CO. 1
1-1/0	5-1/2 J-	55 18	5.5#	-		0400			250 PRIM 430 50/5				93'		
					····										
24. Tubing	Record					<u> </u>									
Size	Depth S	Set (MD)		er Depth (N	MD)	Size	Depth Set	t (MD)	Packer Der	oth (MD)	Siz	e	Deptl	Set (MD)	Packer Depth (MD)
2-7/8" 25. Producii	EOT@	<u></u>	TA @	5780'			26. Per	foration 1	Record					<del></del>	
	Formation			Тор		Bottom	Perf	orated In			Size		Holes		Perf. Status
A) Green F B)	River		44	407'		5827'	4407-582	27'	<del></del>	.36"		78	-		
C)						_									
D)															
27. Acid, Fr	acture, Treat		ement Sq	ueeze, etc	o.				Amount and	Type of N	(aterial				·
4407-5827			Fr	ac w/ 22	29925#	20/40 white s	and in 2814					3.			
					·····										
						_								<del></del>	
28. Producti															
Date First Produced	Test Date	Hours Tested	Test Produc	Oil ction BE		1	Water BBL	Oil Grav Corr. Al		Gas Gravity		luction N /2" x 1-		0' x 24' RH	IAC Pump
1/6/12	1/26/12	24		<b>▶</b> 7	5	13	52								•
	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	Oi BE		Gas MCF	Water BBL	Gas/Oil Ratio		Well State					
	SI	i icss.	- Italic		)L	WICI	BBL	Kano		PRODU	CING				
28a. Produc						<u> </u>									
Date First Produced	Test Date	Hours Tested	Test Produ	Oi ction BE		1	Water BBL	Oil Gra Corr. A		Gas Gravity	Proc	luction N	<b>1ethod</b>		
CI. I	~		-							777 11 ~				REC	Enzes
	Tbg. Press. Flwg.	Csg. Press.	24 Hr. Rate	. Oi BE		Gas MCF	Water BBL	Gas/Oil Ratio		Well Stati	18				EIVED
	SI													JUN 2	1 2012

Tested Production BBL MCF BBL Corr. API Gravity  Choke Tog. Press. Csg. 24 Hr. Oil Gas Water Gas/Oil Well Status  28c. Production - Interval D  Date First Test Date Hours Production BBL MCF BBL Corr. API Gravity  Choke Tog. Press. Csg. 22 Hr. Oil Gas Water Oil Gravity  Choke Tog. Press. Csg. Csg. Capt. API Gravity  Choke Tog. Press. Csg. Csg. Capt. API Gravity  Choke Tog. Press. Csg. Csg. Capt. API Gravity  Size Flwg. Press. Rate BBL MCF BBL Ratio  Well Status  29. Disposition of Gas (Solid, used for fuel, vented, etc.)  USED FOR FUEL  30. Summary of Porous Zones (Include Aquifers):  Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.  Formation Top Bottom Descriptions, Contents, etc. Name	
Size	
Size   Flwg.   Press.   Rate   BBL   MCF   BBL   Ratio	
Date First Produced       Test Date Production       Hours Tested       Oil BBL       Gas MCF       Water BBL       Oil Gravity       Gas Gravity       Production Method         Choke Size Flwg.       Tbg. Press.       Csg. 24 Hr. Oil Gas BBL       Water Gas/Oil BBL       Well Status         29. Disposition of Gas (Solid, used for fuel, vented, etc.)       USED FOR FUEL         30. Summary of Porous Zones (Include Aquifers):         Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.       GEOLOGICAL MARKERS         Formation       Top       Bottom       Descriptions, Contents, etc.       Name	
Produced Tested Production BBL MCF BBL Corr. API Gravity  Choke Tbg. Press. Csg. 24 Hr. Oil Gas Water Gas/Oil Well Status  29. Disposition of Gas (Solid, used for fuel, vented, etc.)  USED FOR FUEL  30. Summary of Porous Zones (Include Aquifers): Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.  Formation Top Bottom Descriptions, Contents, etc. Name	
Size Flwg. Press. Rate BBL MCF BBL Ratio  29. Disposition of Gas (Solid, used for fuel, vented, etc.)  USED FOR FUEL  30. Summary of Porous Zones (Include Aquifers): Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.  Solve all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.  Solve all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.  Solve all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.  Name	
USED FOR FUEL  30. Summary of Porous Zones (Include Aquifers):  Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.  Formation  Top  Bottom  Descriptions, Contents, etc.  31. Formation (Log) Markers  GEOLOGICAL MARKERS  Markers  Markers  Markers  GEOLOGICAL MARKERS	
30. Summary of Porous Zones (Include Aquifers):  Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.    Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.    Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.    Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.    Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.    Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.    Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including tested and tes	
Show all important zones of porosity and contents thereof: Cored intervals and all drill-stem tests, including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.    Formation   Top   Bottom   Descriptions, Contents, etc.   Name   M.	
including depth interval tested, cushion used, time tool open, flowing and shut-in pressures and recoveries.  Formation Top Bottom Descriptions, Contents, etc.  Name	
M.	
M.	Тор
	eas. Depth
GREEN RIVER         4407'         5827'         GARDEN GULCH MARKER         3866'           GARDEN GULCH 1         4094'	
GARDEN GULCH 2 4207' POINT 3 MARKER 4475'	
X MRKR 4739' Y MRKR 4778'	
DOUGLAS CREEK MRKR 4898' 5144'	
B LIMESTONE 5262' CASTLE PEAK 5792	
BASAL CARBONATE 6253' 6380'	
32. Additional remarks (include plugging procedure): Well began flowing on 1/6/2012, during the drilling process. Well was placed on pump on 01/16/2012, and test data was collected 10 days folloactivation.	owing pump
33. Indicate which items have been attached by placing a check in the appropriate boxes:	
☐ Electrical/Mechanical Logs (1 full set req'd.) ☐ Geologic Report ☐ DST Report ☐ Directional Survey ☐ Sundry Notice for plugging and cement verification ☐ Core Analysis ☐ Other: Drilling Daily Activity	
34. I hereby certify that the foregoing and attached information is complete and correct as determined from all available records (see attached instructions)*	
Name (please print) Pennifer Peatross  Title Production Technician	•
Signature	

(Continued on page 3) (Form 3160-4, page 2)



## **NEWFIELD EXPLORATION**

USGS Myton SW (UT) SECTION 4 T-5-9-16

Wellbore #1

**Design: Actual** 

# **Standard Survey Report**

05 December, 2011





Survey Report



Company:

**NEWFIELD EXPLORATION** 

Project:

USGS Myton SW (UT)

Site: Well: SECTION 4 T-5-9-16

Wellbore: Design:

Wellbore #1

Actual

Local Co-ordinate Reference:

Well T-5-9-16

TVD Reference:

MD Reference: North Reference:

Database:

T-5-9-16 @ 5784.0ft (Capstar 329) T-5-9-16 @ 5784.0ft (Capstar 329)

**Survey Calculation Method:** 

Minimum Curvature

EDM 2003.21 Single User Db

Project

USGS Myton SW (UT), DUCHESNE COUNTY, UT, USA

Map System:

US State Plane 1983

North American Datum 1983

Geo Datum: Map Zone:

Utah Central Zone

System Datum:

Mean Sea Level

Site

SECTION 4, SEC 4 T9S, R16E

Site Position:

Northing:

7,193,502.00 ft

Latitude:

40° 3' 35.508 N

From:

Lat/Long

Easting:

2,026,216.16ft

Longitude:

Position Uncertainty:

0.0 ft

Slot Radius:

**Grid Convergence:** 

110° 7' 17.611 W

0.88°

Well

T-5-9-16, SHL LAT: 40 03 16.35 LONG: -110 07 53.99

Well Position

+N/-S

+E/-W

0.0 ft 0.0 ft Northing:

7,191,520.30 ft 2,023,417.76 ft Latitude: Longitude:

40° 3' 16.350 N 110° 7' 53.990 W

**Position Uncertainty** 

0.0 ft

Easting: Wellhead Elevation:

5,784.0 ft

**Ground Level:** 

5,772.0 ft

Wellbore Wellbore #1 Magnetics Dip Angle Field Strength **Model Name** Sample Date Declination (°) (°) IGRF2010 12/28/2010 65.80 11.40 52,309

Design

Actual

Audit Notes:

Version:

1.0

Phase:

(ft)

0.0

ACTUAL

Tie On Depth:

0.0

Vertical Section:

Depth From (TVD)

+N/-S (ft) 0.0

+E/-W (ft) 0.0

Direction (°)

315.41

Survey Program Date 12/5/2011

From (ft)

To (ft)

Survey (Wellbore)

**Tool Name** 

Description

503.0

6,354.0 Survey #1 (Wellbore #1)

MWD

MWD - Standard

Survey

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)	(°)	<b>(°)</b>	(ft)	(ft)	(ft)	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
0.0	0.00	0.00	0.0	0.0	0.0	0.0	0.00	0.00	0.00
503.0	0.31	180.80	503.0	-1.4	0.0	-1.0	0.06	0.06	0.00
533.0	0.30	179.10	533.0	-1.5	0.0	-1.1	0.04	-0.03	-5.67
564.0	0.31	189.70	564.0	-1.7	0.0	-1.2	0.18	0.03	34.19
595.0	0.70	249.10	595.0	-1.8	-0.2	-1.1	1.95	1.26	191.61
626.0	0.80	258.10	626.0	-1.9	-0.6	-1.0	0.50	0.32	29.03
657.0	1.10	273.50	657.0	-2.0	-1.1	-0.6	1.26	0.97	49.68
688.0	1.70	286.00	688.0	-1.8	-1.9	0.0	2.16	1.94	40.32
719.0	2.30	285.60	719.0	-1.5	-2.9	0.9	1.94	1.94	-1.29
749.0	2.90	292.87	748.9	-1.1	-4.2	2.2	2.28	2.00	24.23
780.0	3.50	298.40	779.9	-0.3	-5.7	3.8	2.17	1.94	17.84
810.0	4.20	301.40	809.8	0.7	-7.5	5.7	2.43	2.33	10.00
841.0	4.70	309.30	840.7	2.1	-9.4	8.1	2.55	1.61	25.48



Survey Report



Company: Project:

NEWFIELD EXPLORATION

USGS Myton SW (UT)

Site:

SECTION 4

Well: Wellbore: T-5-9-16 Wellbore #1 Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: **Survey Calculation Method:**  Well T-5-9-16

T-5-9-16 @ 5784.0ft (Capstar 329)

T-5-9-16 @ 5784.0ft (Capstar 329)

True

Minimum Curvature

Velibore: VVe Design: Act				Minimum Curvature EDM 2003.21 Single User Db					
urvey	onigional i di Marka e yesare								
Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth	Inclination	Azimuth	Depth	+N/-S	+E/-W	Section	Rate	Rate	Rate
(ft)			(ft)		一个 网络人名克格兰 化压力 医皮肤 化二	(ft)	(°/100ft)	(°/100ft)	(°/100ft)
119	(°)	(°)	(ii)	(ft)	(ft)		( ) looil)	( Floory	( ) toolig
872.0	5.10	320.50	871.6	3.9	-11.3	10.7	3.34	1.29	36.13
917.0	5.90	323.00	916.4	7.3	-14.0	15.0	1.86	1.78	5.56
962.0	6 55	202.00	064.4	44.3	10.0	10.0			4.70
1,007.0	6.55 6.90	323.80 323.80	961.1	11.3	-16.9	19.9	1.46	1.44	1.78
1,053.0	7.00	325.80	1,005.8 1,051.5	15.5 20.1	-20.0 -23.2	25.1 30.6	0.78 0.57	0.78 0.22	0.00 4.35
1,098.0	7.38	323.50	1,096.1	24.6	-23.2 -26.4	36.1	1.06	0.84	-5.11
1,143.0	8.30	321.20	1,140.7	29.5	-30.2	42.2	2.16	2.04	-5.11
			1, 140.7				2.10	2.04	-5.11
1,188.0	8.80	319.60	1,185.2	34.7	-34.5	48.9	1.23	1.11	-3.56
1,234.0	9.50	317.60	1,230.6	40.1	-39.3	56.2	1.67	1.52	-4.35
1,279.0	10.00	319.50	1,275.0	45.9	-44.3	63.8	1.32	1.11	4.22
1,324.0	10.70	318.80	1,319.2	52.0	-49.6	71.9	1.58	1.56	-1.56
1,370.0	11.10	315.30	1,364.4	58.3	-55.6	80.5	1.68	0.87	-7.61
1,415.0	11.60	316.20	1,408.5	64.7	-61.7	89.4	1.18	1.11	2.00
1,460.0	12.00	317.50	1,452.6	71.4	-61.7 -68.0	98.6	1.16	0.89	2.89
1,506.0	12.00	317.50	1,45∠.6 1,497.6	71. <del>4</del> 78.5	-68.0 -74.5	108.2	0.26	0.89	-0.65
1,551.0	12.10	317.20 316.56		76.5 85.4	-74.5 -81.0		0.26 0.47		
1,597.0	12.40	315.20	1,541.6 1,586.5	85.4 92.4	-81.0 -87.9	117.7 127.5		0.36	-1.42 -2.96
			1,586.5	3∠.4	-07.9	127.5	0.70	0.30	-2.96
1,642.0	12.52	315.28	1,630.4	99.3	-94.7	137.2	0.27	0.27	0.18
1,687.0	12.60	313.00	1,674.4	106.1	-101.7	147.0	1.12	0.18	-5.07
1,733.0	12.48	313.50	1,719.3	113.0	-109.0	157.0	0.35	-0.26	1.09
1,778.0	12.35	311.77	1,763.2	119.5	-116.1	166.6	0.88	-0.29	-3.84
1,823.0	12.57	311.77	1,807.1	126.0	-123.4	176.3	0.49	0.49	0.00
4.000.0	40.70	240.45	1.851.1	400.5	400.0	400.4	0.70	0.00	0.00
1,868.0	12.70	310.45		132.5	-130.8	186.1	0.70	0.29	-2.93
1,913.0	12.25	309.39	1,895.0	138.7	-138.2	195.8	1.12	-1.00	-2.36
1,959.0	11.79	312.33	1,940.0	145.0	-145.5	205.4	1.66	-1.00	6.39
2,005.0	11.07	311.81	1,985.1	151.1	-152.2	214.5	1.58	-1.57	-1.13
2,051.0	10.80	314.70	2,030.2	157.1	-158.6	223.2	1.33	-0.59	6.28
2,096.0	11.20	317.90	2,074.4	163.3	-164.5	231.8	1.62	0.89	7.11
2,141.0	11.90	319.90	2,118.5	170.1	-170.4	240.8	1.79	1.56	4.44
2,187.0	12.30	320.70	2,163.5	177.5	-176.6	250.4	0.94	0.87	1.74
2,232.0	12.90	321.80	2,207.4	185.1	-182.7	260.1	1.44	1.33	2.44
2,277.0	13.50	321.80	2,251.2	193.2	-189.1	270.3	1.33	1.33	0.00
2,323.0	13.89	320.12	2,295.9	201.7	-196.0	281.2	1.21	0.85	-3.65
2,368.0	13.40	317.10	2,339.6	209.6	-203.0	291.8	1.92	-1.09	-6.71
2,415.0	12.44	314.40	2,385.4	217.2	-210.3	302.3	2.41	-2.04	-5.74
2,459.0	12.30	314.60	2,428.4	223.8	-217.0	311.7	0.33	-0.32	0.45
2,504.0	12.70	314.50	2,472.4	230.6	-224.0	321.4	0.89	0.89	-0.22
2,549.0	13.10	314.20	2,516.2	237.6	-231.1	331.5	0.90	0.89	-0.67
2,595.0	13.60	317.20	2,561.0	245.2	-238.6	342.1	1.86	1.09	6.52
2,640.0	13.40	317.60	2,604.7	253.0	-245.7	352.6	0.49	-0.44	0.89
2,686.0	13.40	316.80	2,649.5	260.8	-252.9	363.3	0.40	0.00	-1.74
2,731.0	13.40	316.60	2,693.3	268.4	-260.1	373.7	0.10	0.00	-0.44
2,776.0	13.50	316.70	2,737.0	276.0	-267.2	384.2	0.23	0.22	0.22
2,822.0	13.50	315.00	2,781.7	283.7	-274.7	394.9	0.86	0.00	-3.70
2,867.0	13.70	314.10	2,825.5	291.1	-282.3	405.5	0.65	0.44	-2.00
2,912.0	13.90	313.80	2,869.2	298.6	-290.0	416.2	0.47	0.44	-0.67
2,958.0	13.49	313.39	2,913.9	306.1	-297.9	427.1	0.92	-0.89	-0.89
3,003.0	13.71	314.10	2,957.6	313.4	-305.5	437.7	0.61	0.49	1.58
3,048.0	12.79	310.62	2,957.6 3,001.4	313.4	-305.5 -313.1	437.7 448.0	2.70	-2.04	-7.73
3,094.0	12.79	310.62	3,001.4 3,046.4	320.3 326.7	-313.1 -320.4	448.0 457.6	2.70 2.85	-2.0 <del>4</del> -2.80	-7.73 2.35
3,139.0	11.00	313.40	3,090.5	332.6	-326.9	466.4	1.33	-1.11	3.78
3,184.0	11.00	314.60	3,134.7	338.6	-333.1	475.0	0.51	0.00	2.67
3,230.0	11.10	314.60	3,179.8	344.8	-339.3	483.8	0.22	0.22	0.00
3,275.0	10.46	314.50	3,224.1	350.7	-345.3	492.2	1.42	-1.42	-0.22



Survey Report



Company: Project:

NEWFIELD EXPLORATION

USGS Myton SW (UT)

Site: Well: SECTION 4 T-5-9-16

Wellbore: Design:

Wellbore #1 Actual

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference:

**Survey Calculation Method:** 

Database:

Well T-5-9-16

T-5-9-16 @ 5784.0ft (Capstar 329) T-5-9-16 @ 5784.0ft (Capstar 329)

Minimum Curvature

EDM 2003.21 Single User Db

Measured			Vertical			Vertical	Dogleg	Build	Turn
Depth (ft)	Inclination (°)	Azimuth (°)	Depth (ft)	+N/-S (ft)	+E/-W (ft)	Section (ft)	Rate (°/100ft)	Rate (°/100ft)	Rate (°/100ft)
3,320.0	10.90	315.50	3,268.3	356,6	-351.2	500.5	1.06	0.98	2.22
3,366.0	11.90	317.60	3,313.4	363.2	-351.2 -357.5	509.6	1.06 2.35	2.17	4.57
3,411.0	12.50	315.80	3,357.3	370.1	-364.0	519.1	1.58	1.33	-4.00
3,456.0	12.50	315.50	3,401.3	377.1	-370.8	528.9	0.14	0.00	-0.67
3,502.0	12.70	317.60	3,446.2	384.4	-377.7	538.9	1.09	0.43	4.57
3,547.0	12.90	318.90	3,490.1	391.8	-384.4	548.8	0.78	0.44	2.89
3,592.0	13.10	319.00	3,533.9	399.4	-391.0	559.0	0.45	0.44	0.22
3,638.0	12.57	318.01	3,578.8	407.1	-397.8	569.2	1.25	-1.15	-2.15
3,683.0	12.00	316.20	3,622.7	414.1	-404.3	578.7	1.53	-1.27	-4.02
3,728.0	12.10	316.60	3,666.7	420.9	-410.8	588.1	0.29	0.22	0.89
3,774.0	12.00	318.30	3,711.7	428.0	-417.3	597.7	0.80	-0.22	3.70
3,819.0	11.50	320.20	3,755.8	434.9	-423.2	606.9	1.40	-1.11	4.22
3,865.0	10.33	322.16	3,800.9	441.7	-428.7	615.5	2.67	-2.54	4.26
3,910.0	9.54	321.48	3,845.3	447.8	-433.5	623.2	1.77	-1.76	-1.51
3,955.0	9.40	317.10	3,889.7	453.4	-438.3	630.6	1.63	-0.31	-9.73
4,001.0	9.76	312.50	3,935.0	458.8	-443.8	638.3	1.84	0.78	-10.00
4,046.0	10.70	308.60	3,979.3	464.0	-449.8	646.2	2.59	2.09	-8.67
4,091.0	11.60	306.80	4,023.4	469.3	-456.7	654.8	2.14	2.00	-4.00
4,137.0	12.60	307.50	4,068.4	475.1	-464.4	664.4	2.20	2.17	1.52
4,182.0	12.80	305.00	4,112.3	481.0	-472.4	674.2	1.30	0.44	-5.56
4,228.0	13.10	305.60	4,157.2	486.9	-480.8	684.3	0.71	0.65	1.30
4,273.0	13.17	304.89	4,201.0	492.8	-489.1	694.4	0.39	0.16	-1.58
4,318.0	13.49	305.48	4,244.8	498.8	-497.6	704.6	0.77	0.71	1.31
4,364.0	13.70	305.70	4,289.5	505.1	-506.4	715.2	0.47	0.46	0.48
4,409.0	13.30	305.90	4,333.2	511.3 €	-514.9	725.6	0.89	-0.89	0.44
4,454.0	12.70	306.20	4,377.1	517.2	-523.1	735.6	1.34	-1.33	0.67
4,500.0	12.17	306.89	4,422.0	523.1	-531.1	745.4	1.20	-1.15	1.50
4,545.0	11.51	306.19	4,466.0	528.6	-538.5	754.5	1.50	-1.47	-1.56
4,590.0	11.43	306.49	4,510.1	533.9	-545.7	763.3	0.22	-0.18	0.67
4,636.0	10.90	305.30	4,555.3	539.1	-552.9	772.1	1.26	-1.15	-2.59
4,681.0	10.70	306.00	4,599.5	544.0	-559.8	780.4	0.53	-0.44	1.56
4,726.0	11.20	307.90	4,643.7	549.2	-566.6	788.9	1.37	1.11	4.22
4,772.0	11.30	311.00	4,688.8	554.9	-573.5	797.8	1.33	0.22	6.74
4,817.0	11.40	312.90	4,732.9	560.8 567.0	-580.1	806.6	0.86	0.22	4.22
4,862.0	11.50	314.80 315.50	4,777.0	567.0 573.5	-586.6	815.6	0.87	0.22	4.22
4,908.0 4,953.0	11.50 11.70	315.50 315.20	4,822.1 4,866.2	573.5 579.9	-593.0 -599.4	824.7 833.8	0.30 0.46	0.00 0.44	1.52 -0.67
4,986.0	11.63	313.59	4,898.4	579.9 584.6	-599.4 -604.1	840.4	1.01	-0.23	-0.67 -4.88
T-5-9-16 TG		313.33	4,030.4	304.0	-004. I	040.4	1.01	-0.23	-4.00
		242.00	4 040 0	F0C 2	005.0	040.0	4.04	0.04	4.00
4,998.0 5,044.0	11.60 11.60	313.00 311.30	4,910.2 4,955.3	586.3 592.5	-605.9 -612.8	842.9 852.1	1.01 0.74	-0.21 0.00	-4.92 -3.70
		312.80	4,999.4		-619.5				
5,089.0 5,135.0	11.80 12.40	312.80 315.80	4,999.4 5,044.3	598.6 605.3	-619.5 -626.4	861.2 870.8	0.81 1.89	0.44 1.30	3.33 6.52
5,135.0 5,180.0	12.40	315.60	5,0 <del>44</del> .3 5,088.3	612.1	-626.4 -633.1	870.8 880.4	1.03	-0.89	-2.44
5,225.0	11.50	311.20	5,132.4	618.3	-639.8	889.5	1.93	-1.11	-7.78
5,271.0	11.80	314.90	5,177.4	624.7	-646.6	898.8	1.75	0.65	8.04
5,317.0	12.10	319.90	5,222.4	631.7	-653.0	908.3	2.34	0.65	10.87
5,361.0	11.70	320.20	5,265.5	638.6	-658.9	917.3	0.92	-0.91	0.68
5,406.0	11.70	318.70	5,309.6	645.5	-664.8	926.4	0.68	0.00	-3.33
5,452.0	12.00	318.93	5,354.6	652.7	-671.0	935.9	0.66	0.65	0.50
5,494.0	11.60	320.50	5,395.7	659.2	-676.6	944.4	1.22	-0.95	3.74
5,543.0	11.38	319.90	5,443.7	666.7	-682.8	954.2	0.51	-0.45	-1.22
5,588.0 5,633.0	11.90	316.70	5,487.8	673.5	-688.9	963.2	1.84	1.16	-7.11



Survey Report



Company:

NEWFIELD EXPLORATION

1:9

Project:

USGS Myton SW (UT)

Site: Well: SECTION 4 T-5-9-16

Wellbore: Design:

Wellbore #1 Actual

Local Co-ordinate Reference:

TVD Reference:

MD Reference:

North Reference: **Survey Calculation Method:** 

Database:

Well T-5-9-16

T-5-9-16 @ 5784.0ft (Capstar 329)

T-5-9-16 @ 5784.0ft (Capstar 329)

Minimum Curvature

EDM 2003.21 Single User Db

Survey				THE STATE OF THE S		onengen verget <del>i 111</del> Jetakon	TURNING VIEWW			
	Measured Depth (ft)	Inclination (°)	Azimuth (°)	Vertical Depth (ft)	+N/-S (ft)	+E/-W (ft)	Vertical Section (ft)	Dogleg Rate (°/100ft)	Build Rate (°/100ft)	Turn Rate (°/100ft)
	5,679.0	12.90	317.50	5,576.6	687.6	-702.5	982.8	1.60	0.87	6.09
	5,724.0	13.20	320.60	5,620.5	695.2	-709.2	993.0	1.69	0.67	6.89
	5,769.0	13.10	323.70	5,664.3	703.3	-715.5	1,003.1	1.58	-0.22	6.89
	5,815.0	12.90	321.60	5,709.1	711.5	-721.7	1,013.4	1.12	-0.43	-4.57
	5,860.0	13.10	319.70	5,753.0	719.4	-728.1	1,023.5	1.05	0.44	-4.22
	5,905.0	13.90	319.60	5,796.7	727.4	-734.9	1,034.0	1.78	1.78	-0.22
	5,951.0	14.30	318.90	5,841.3	735.9	-742.3	1,045.1	0.95	0.87	-1.52
	5,996.0	13.90	318.70	5,885.0	744.1	-749.5	1,056.1	0.90	-0.89	-0.44
	6,051.0	13.67	320.20	5,938.4	754.1	-758.0	1,069.2	0.77	-0.42	2.73
	6,087.0	13.20	321.30	5,973.4	760.5	-763.3	1,077.5	1.49	-1.31	3.06
	6,132.0	12.39	319.15	6,017.3	768.2	-769.7	1,087.4	2.09	-1.80	-4.78
	6,177.0	12.40	316.70	6,061.2	775.4	-776.1	1,097.1	1.17	0.02	-5.44
	6,223.0	11.25	314.67	6,106.3	782.1	-782.7	1,106.5	2.66	-2.50	-4.41
	6,268.0	11.03	317.35	6,150.4	788.4	-788.8	1,115.2	1.25	-0.49	5.96
	6,313.0	10.63	318.89	6,194.6	794.7	-794.4	1,123.6	1.10	-0.89	3.42
	6,354.0 7 %	9.93	319.76	6,235.0 ⊅⊛	800.2	-799.2	1,130.9	1.75	-1.71	2.12

Checked By:	Approved By:	Date:



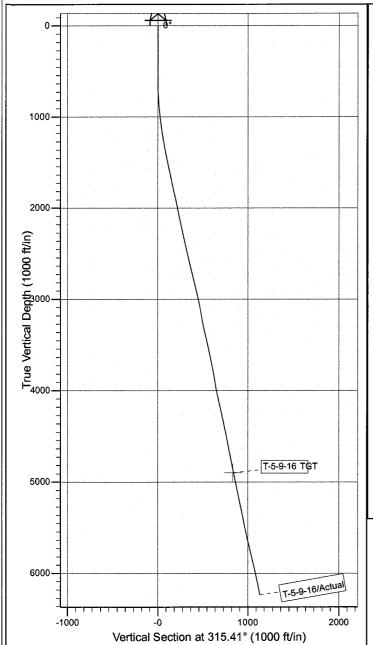
Project: USGS Myton SW (UT) Site: SECTION 4

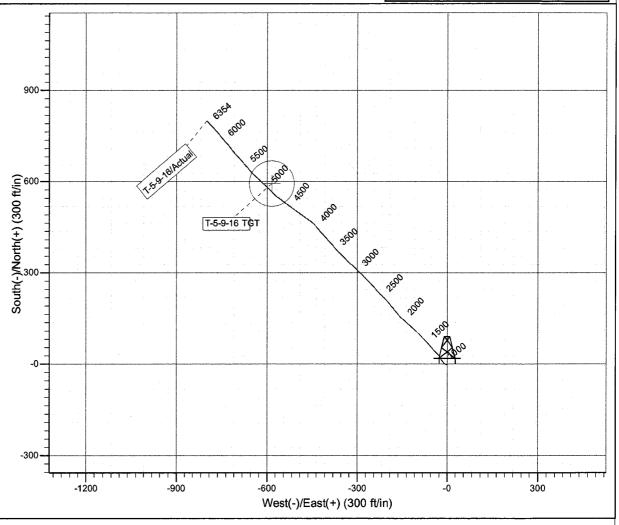
Site: SECTION 4
Well: T-5-9-16
Wellbore: Wellbore #1
Design: Actual



Azimuths to True North Magnetic North: 11.40°

Magnetic Field Strength: 52309.4snT Dip Angle: 65.80° Date: 12/28/2010 Model: IGRF2010





Design: Actual (T-5-9-16/Wellbore #1)

Created By: Sarah Webb

Date:

19:28, December 05 201

THIS SURVEY IS CORRECT TO THE BEST OF MY KNOWLEDGE AND IS SUPPORTED BY ACTUAL FIELD DATA

## **Daily Activity Report**

## Format For Sundry GMBU T-5-9-16 9/1/2011 To 1/30/2012

**GMBU T-5-9-16** 

**Waiting on Cement** 

**Date:** 11/6/2011

Ross #29 at 330. Days Since Spud - 329.88'KB. On 11/1/11 cement w/BJ w/160 sks of class G+2%kcl+.25#CF mixed @ 15.8ppg and 1.17 - yield. Returned 5bbls to pit, bump plug to 474psi, BLM and State were notified of spud via email. - On 10/28/11 Ross #29 spud and drilled 325' of 12 1/4" hole, P/U and run 7 jts of 8 5/8" casing set

Daily Cost: \$0

**Cumulative Cost:** \$55,115

**GMBU T-5-9-16** 

Rigging down

**Date:** 11/26/2011

Capstar #329 at 330. 0 Days Since Spud - Rig Down. Wait on daylight to move to GMBU T-5-

9-16 from GMBU R-5-9-16

Daily Cost: \$0

Cumulative Cost: \$61,804

GMBU T-5-9-16

TIH

**Date:** 11/27/2011

Capstar #329 at 330. 0 Days Since Spud - Repair Rig - Weld Boom Hydraulic Ram Saddle Assembly - Rig Move / Set in Loads - Wait on Daylight - Nipple up BOP - Test BOP to 2000 psi - MU and scribe directional tools - Hook up Kelly Hose - Rig Up

Daily Cost: \$0

**Cumulative Cost:** \$96,365

#### **GMBU T-5-9-16**

#### Drill 7 7/8" hole with fresh water

**Date:** 11/28/2011

Capstar #329 at 3331. 1 Days Since Spud - Rig Service - Drill 7 7/8" hole from 330' to 1789' - GPM = 430 - WOB = 10 to 15 - TRPM = 200 ROP = 154 Fph - Drill cement from 252' - 330' - RIH on HWDP - Tag cement at 252' - Drill 7 7/8" hole from 1789' to 3331' - GPM = 430 - WOB = 10 to 15 - TRPM = 200 ROP = 128 Fph

Daily Cost: \$0

**Cumulative Cost:** \$121,478

#### **GMBU T-5-9-16**

#### Drill 7 7/8" hole with fresh water

**Date:** 11/29/2011

Capstar #329 at 4646. 2 Days Since Spud - After connection at 3790', ROP dropped off. Differential pressure & torque dropped off as well. - Send BLM TD Notice @ 05:00 11/29/2011 - Drill 7 7/8" hole from 3890' to 4646'. GPM = 425 - WOB = 10 - 20 TRPM = 140 - 200 ROP = 80 Fph - MU new bit and RIH to 3890'. Wash last jt to bottom. - Flow check, pump slug. POOH. Bit cored out. - Pump 60 bbl x 80 vis sweep. Prepare to POOH to check the bit and motor. - Adjust drilling parameters & pump viscous sweep with walnut hulls. No increase in ROP. - Drill 7 7/8" hole from 3790' to 3890' - GPM = 425 - WOB = 10 to 35 - TRPM = 140 - 200 ROP = 33 Fph - Drill 7 7/8" hole from 3331' to 3790' - GPM = 430 - WOB = 15 to 20 - TRPM = 140 - 200 ROP = 115 Fph

Daily Cost: \$0

Cumulative Cost: \$182,831

#### **GMBU T-5-9-16**

#### Drill 7 7/8" hole with fresh water

**Date:** 11/30/2011

Capstar #329 at 6142. 3 Days Since Spud - Drill 7 7/8" hole from 4646' to 5462'. GPM = 425 - WOB = 10 - 20 TRPM = 140 - 200 ROP = 71 fph - Drill 7 7/8" hole from 5462' to 6142'. GPM = 425 - WOB = 10 - 20 TRPM = 140 - 200 ROP = 57 fph - Rig Service

Daily Cost: \$0

Cumulative Cost: \$208,672

#### **GMBU T-5-9-16**

#### Drill 7 7/8" hole with fresh water

**Date:** 12/1/2011

Capstar #329 at 6410. 4 Days Since Spud - PJSM. RU PSI logging company and log from LTD - 6393' to surface casing - 330'. - Pump slug and POOH. LD directional drilling tools. Flow check every 2000 ft. - Circulate hole clean - pump 2 x 60 bbl 80 vis pills during circulation. Flow Check - RD loggers. RU to run 5 1/2" production casing. PJSM. - RIH w/149 jts - 6381.32' 5 1/2" 15.5# J-55 LTC Csg. Land @ 6399.93' w/M andrel hanger. Flag jt @ - 3653.79'. Centralizers middle 1st, top 2nd & 3rd jt. Then every 3rd collar for a total of 20. - Drill 7 7/8" hole from 6142' To 6410'. GPM = 425 - w/M work = 10 - 20 TRPM = 140 - 200 ROP = 67 fph - Circulate while rigging up BJ. Hold PJSM.

Daily Cost: \$0

**Cumulative Cost:** \$317,449

#### **GMBU T-5-9-16**

#### **Wait on Completion**

**Date:** 12/2/2011

Capstar #329 at 6430. 5 Days Since Spud - water. Pump 250 sks of premium II lite cement @ 11 ppg and yielding 3.53 cuft/sk, followed by - 430 sks of 50/50 Poz/Class "G" 14 ppg and yielding 1.24 cuft/sk. Drop plug and displace cement - w/152 bbls of fresh water. Circulated 30 Bbls of cement to the surface. - Cement 5 1/2" casing as follows: Pump 10 bbls of dye water, 20 bbls of mud clean, 10 bbls of fresh - Continue circulating and RU BJ cementers. - Flush lines and RD BJ - Hold PJSM. Break out and drain kelly hose. MU BJ cement head and lines. Press test to 3500 psi. - Nipple down BOP and clean mud tanks. Release rig at 1400 hrs 12/1/2011 - Plug bumped to 2310 Psi. Floats held. Bled back 1 Bbls. **Finalized** 

Daily Cost: \$0

Cumulative Cost: \$355,869

**Pertinent Files: Go to File List**